

主机外观图

机型名: U90

上市时间: 2013 年 4 月



产品定义书

项目描述\Project description

产品概述\Product overview

整机外形\Outline	直板	通信制式\Communication system	WCDMA+GSM双模
SIM卡槽数量\SIM card slot number	双卡槽	整机长宽厚尺寸\Dimensions size	70(W)x139(L)x9.8(T)
硬件平台\Hardware platform	MSM8X25Q+PM8029+RTR6285A+AR6005G+WCN2243+OV8830+OV2675		

硬件规格\Hardware specifications

类 型	项 目	描 述
显示屏\DISPLAY	尺寸(英寸)\Size	4.7
	分辨率\Resolution	540*960 (qHD)
	材质\Screen Material	IPS
	色彩数\Color quantity	16M
	连接方式\Connection mode	ZIF
	触摸\Touch	电容触摸
	多点触摸\Multi point touch	多点
	控制IC\Control IC	FT5316
前摄像头\Front camera	像素\Pixel	200万
	变焦类型\Zoom type	定焦FF
	连接方式\Connection mode	SMT
	Sensor型号\Sensor model	OV2675
后摄像头\After camera	像素\Pixel	800万
	变焦类型\Zoom type	自动变焦AF
	连接方式\Connection mode	socket
	Sensor型号\Sensor model	OV8830
电池\Battery	电池容量\Battery capacity	2000mAh
	接触方式\Connection mode	金手指
	电池类型\Battery type	锂离子
声 音\Audio	耳机立体声\Stereo earphone	支持
	免提\Handfree	支持
	喇叭\Speaker	支持
	喇叭尺寸规格\Speaker size specification	单喇叭
	T卡卡槽\Card slot	支持

存 储\Storage	T卡最大容量/Card capacity	16GB
	ROM\ROM	4G
	RAM\RAM	1G
按 键\Key	主键盘板类型\Keyboard type	与主板集成
	触感按键\Tactile keys	支持
	按键LED数量\The LED key quantity	1
	按键LED颜色\The LED key color	白色
FM\FM	FM天线\FM antenna	支持FM（耳机当天线）
	FM外放\FM play	不支持
无线通信\Wireless communication	蓝牙\Bluetooth	支持蓝牙2.1
	NFC\NFC	不支持
	GPS\GPS	支持
	WiFi\WIFI	支持802.11g/b/n
灯 光\Lamp light	闪光灯\Flash lamp	单LED
	手电筒\Flashligh	支持（共用闪光灯）
	七彩灯\Colorful lights	不支持
	紫外验钞灯\Bill detector	不支持
TV	模拟电视\Analog TV	不支持
	数字电视\Digital TV	不支持
	TV-OUT\TV-OUT	不支持
传感器\Sensor	环境光传感器\light sensor	支持
	接近传感器\Proximity sensor	支持
	重力传感器\Gravity sensor	支持
	加速度传感器\Acceleration sensor	支持
	E-compass\E-compass	不支持
	陀螺仪\Gyroscope	不支持
接 口\Interface	耳机接口\Earphone interface	3.5mm耳机
	充电接口\Charging interface	Micro-USB
	USB接口\USB interface	Micro-USB
	HDMI&MHL接口\HDMI&MHL	不支持

拆装机注意事项

一、拆卸注意事项：

- 1.拆卸 FPC 组件时避免由于暴力拆卸造成主板或 FPC 组件破损。
- 2.在拆显示屏的时候注意需要前后四周预热两分钟，温度 120℃
- 3.后摄像头屏蔽罩与主板为一体，如果需要返板时请一起返厂
- 4.具有极性的元件在组装时要注意方向，不要装反。

二、所需工具：

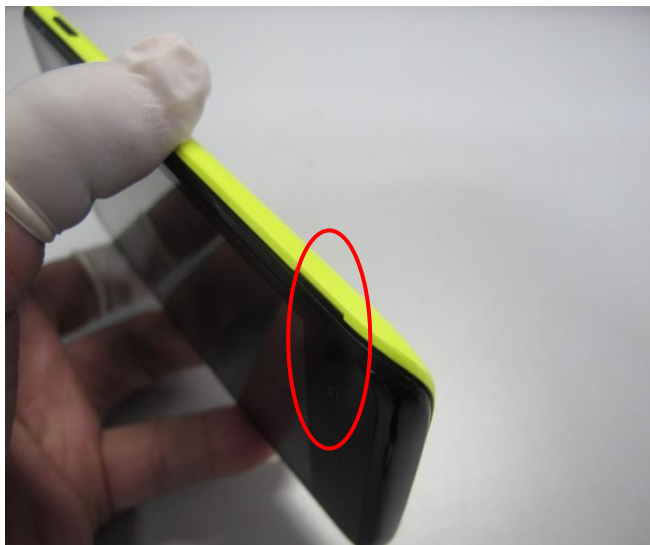
拨片、撬棍、塑料镊子、金属镊子、螺丝刀、手术刀



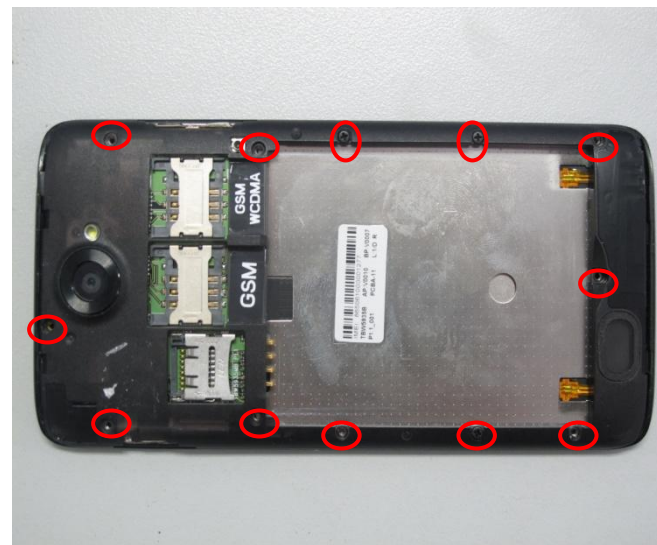
电烙铁



二、步骤:



1) 从缺口处打开电池盖



2) 拧下 12 颗螺钉



3) 从侧面用划片拆开外壳



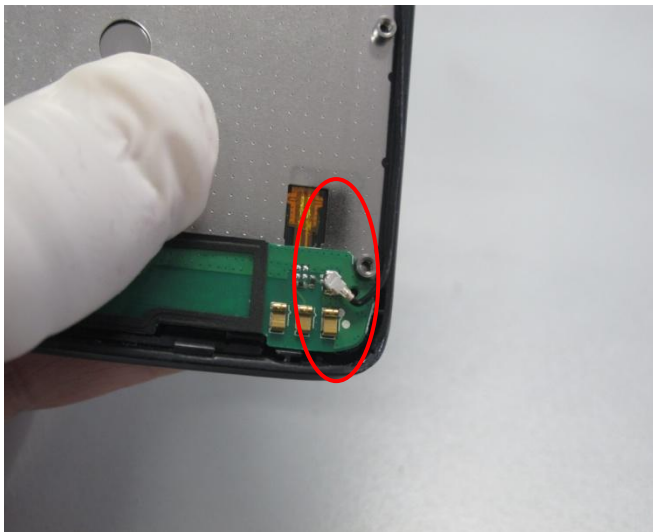
4) 拆下外壳



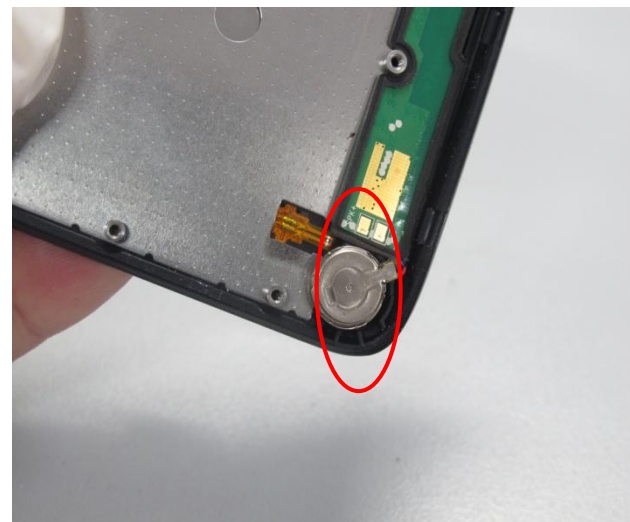
5) 用镊子拆下扬声器



6) 拆下摄像头装饰件



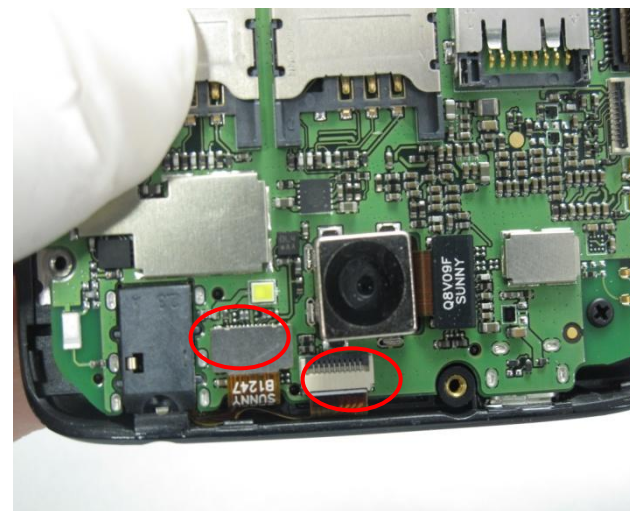
7) 拆下 cable 线



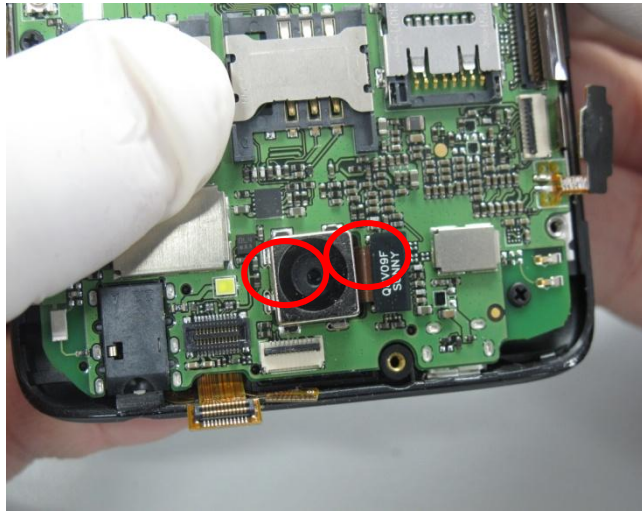
8) 拆下振动器



9) 用镊子打开触摸屏、显示屏接口，取出 FPC 并拆下开机键



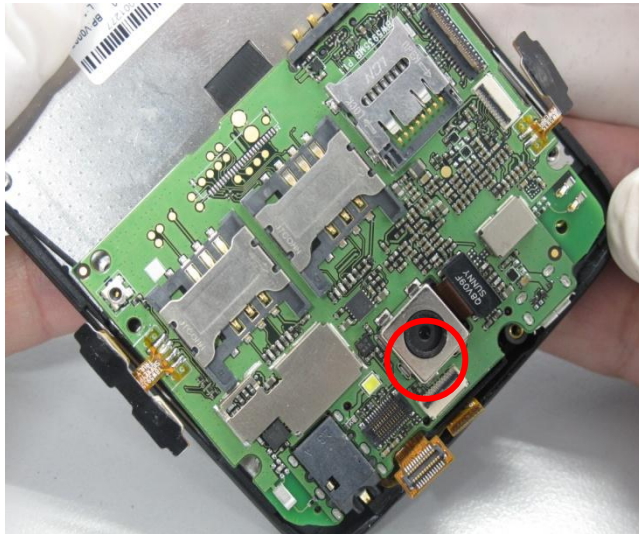
10) 用镊子打开传感器、前摄像头接口并取出 FPC



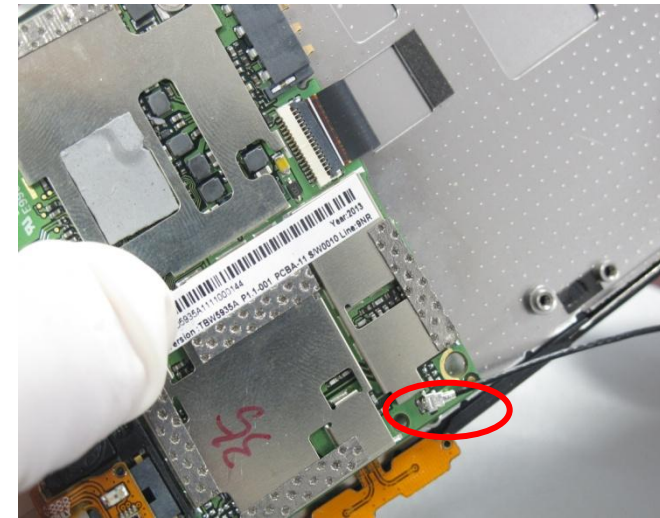
11) 拆开后摄像头接口并拆下摄像头镜片



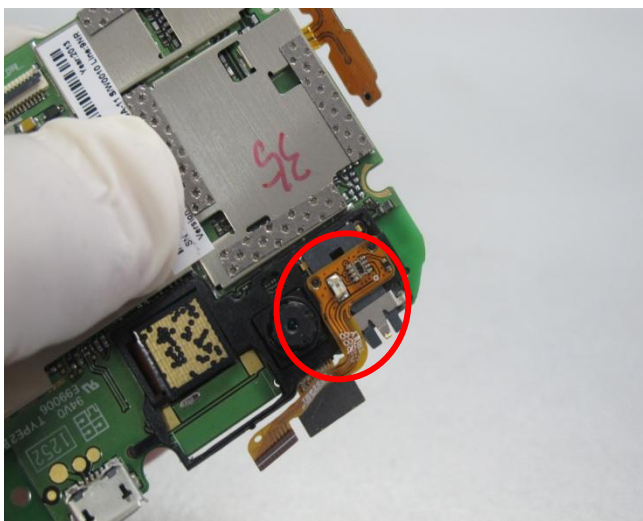
12) 拧下螺钉并拆下侧键 FPC



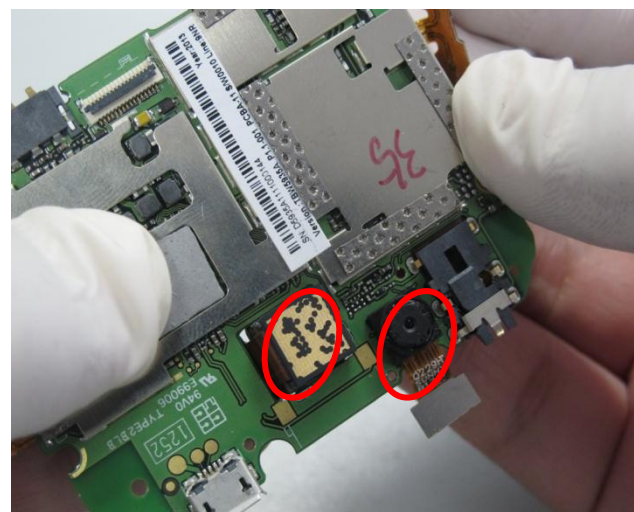
13) 拆下主板 (摄像头屏蔽罩与主板为一体, 返板时需要一起返)



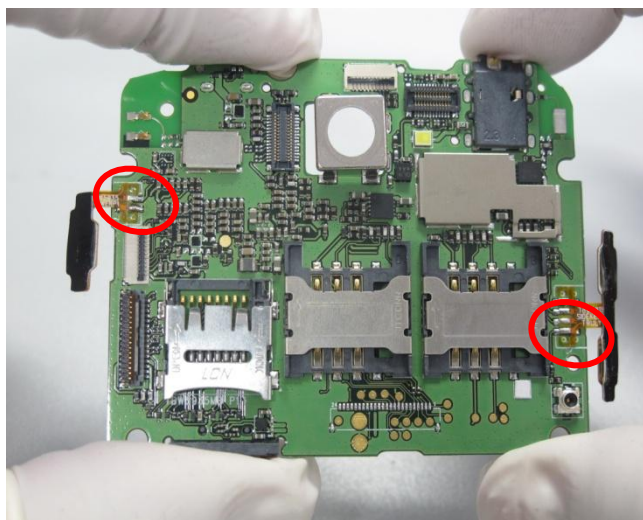
14) 拆开 cable 线



15) 拆下临近传感器 FPC 及传感器支架



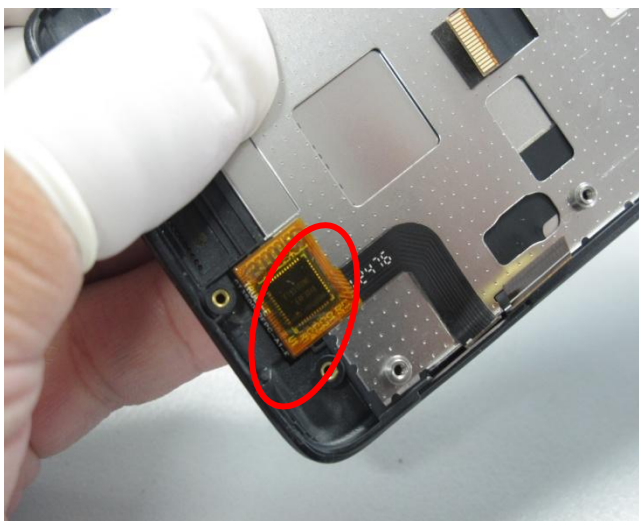
16) 拆下两个摄像头



17) 用烙铁焊下开关机键、音量键 FPC



18) 用镊子拆下听筒和距离传感器硅胶套



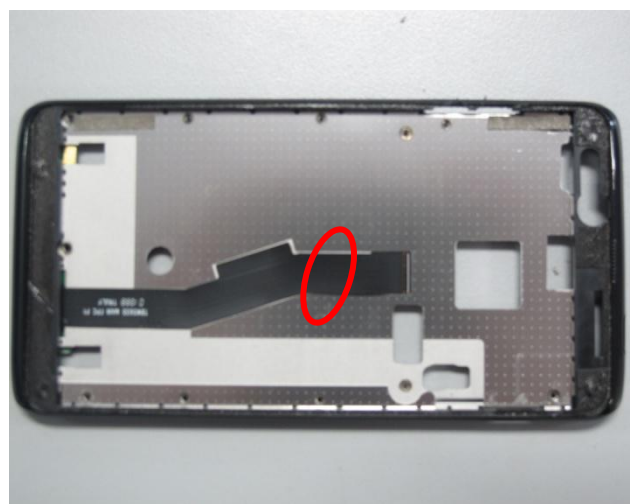
19) 轻微加热拆开触屏 FPC



20) 充分加热后，拆下触摸屏组件



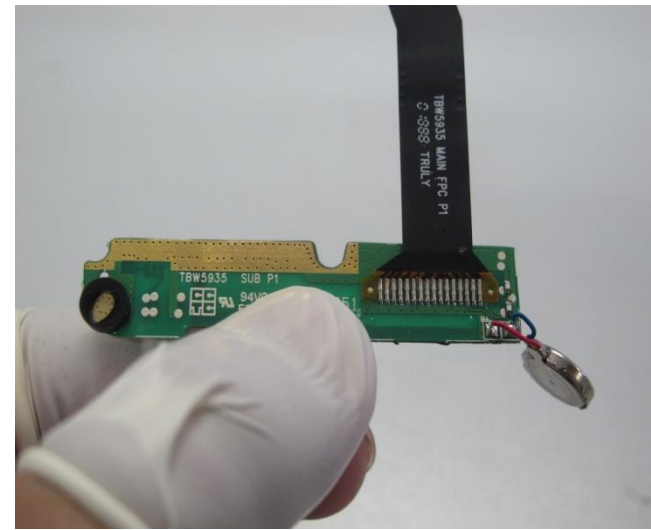
21) 拆下触摸屏组图



22) 拆下主 FPC



23) 拆下副板



24) 取下 mic 硅胶套，用烙铁焊下振动器和主 FPC



26) 全家福

特殊物料识别



名称：显示屏

料号：TYC047TP009124T



名称：前壳组件

料号：TYC5935B010109



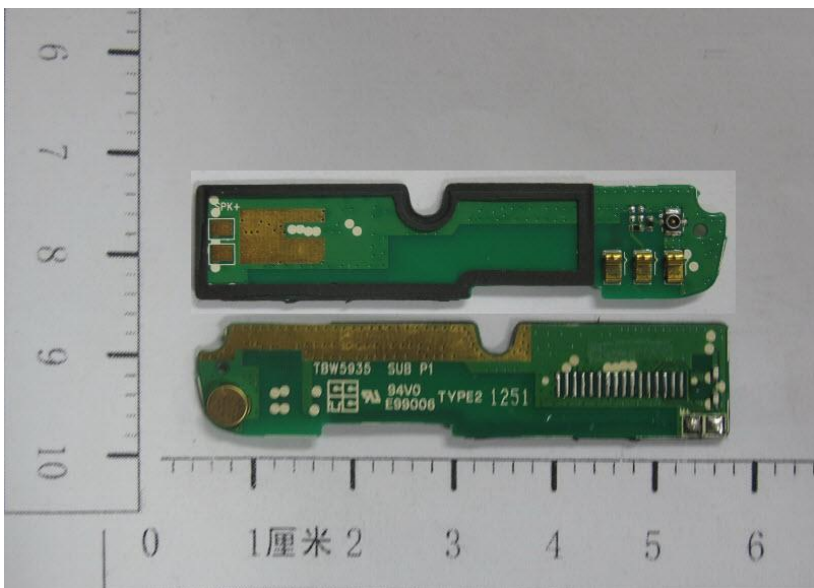
名称：后壳组件

料号：TYC5935B020109



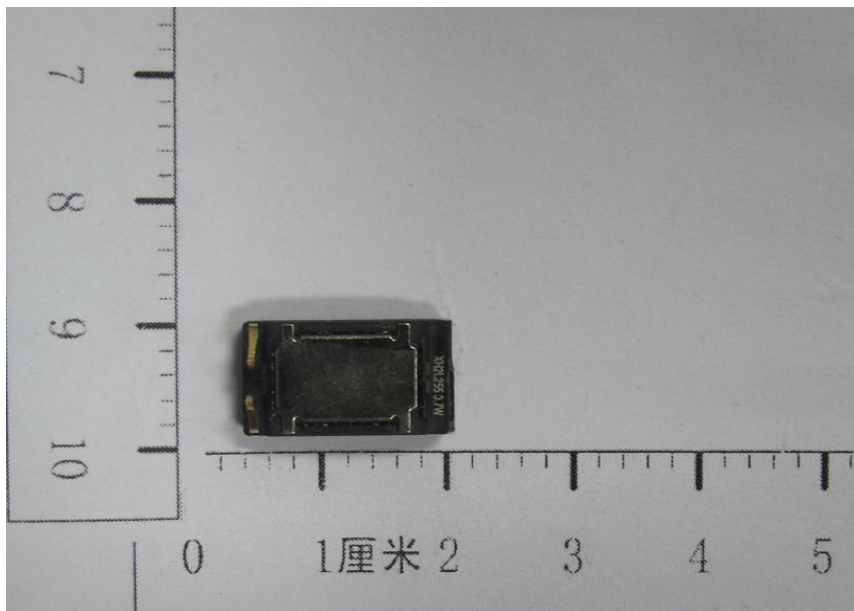
名称：电池盖

料号：TYC5935B050109



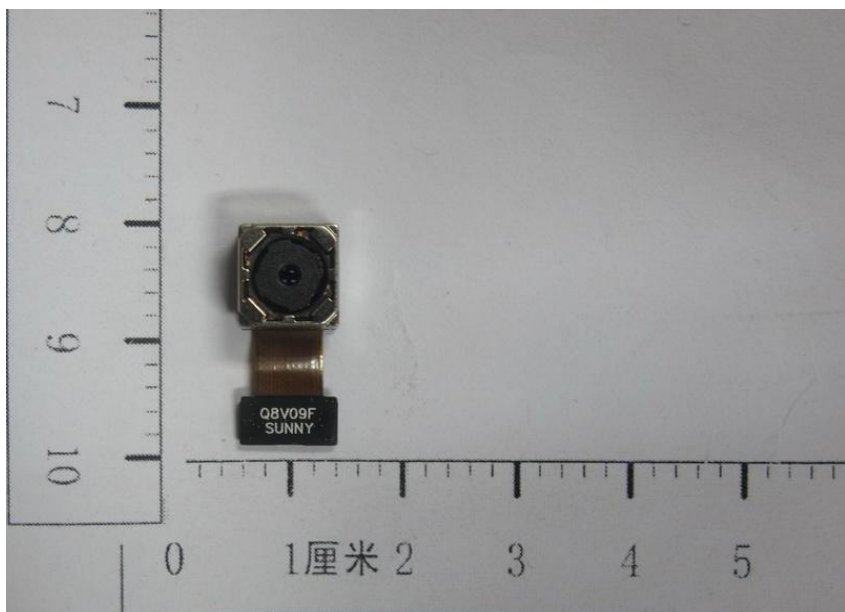
名称：副板

料号：TYC593580410112



名称：扬声器

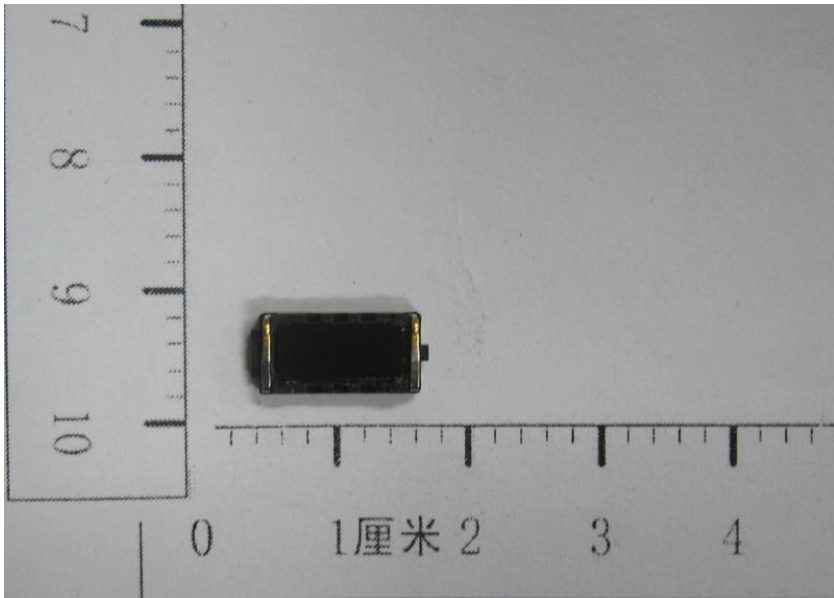
料号：TYC7810A120164



名称：后摄像头

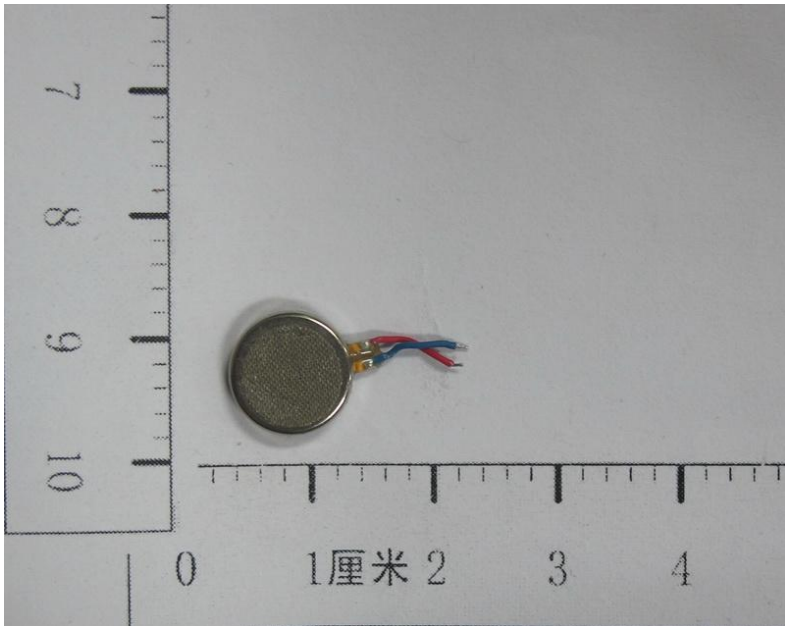
描述：800W

料号：TYC800BA11100S



名称：受话器

料号：TYC9206A130064



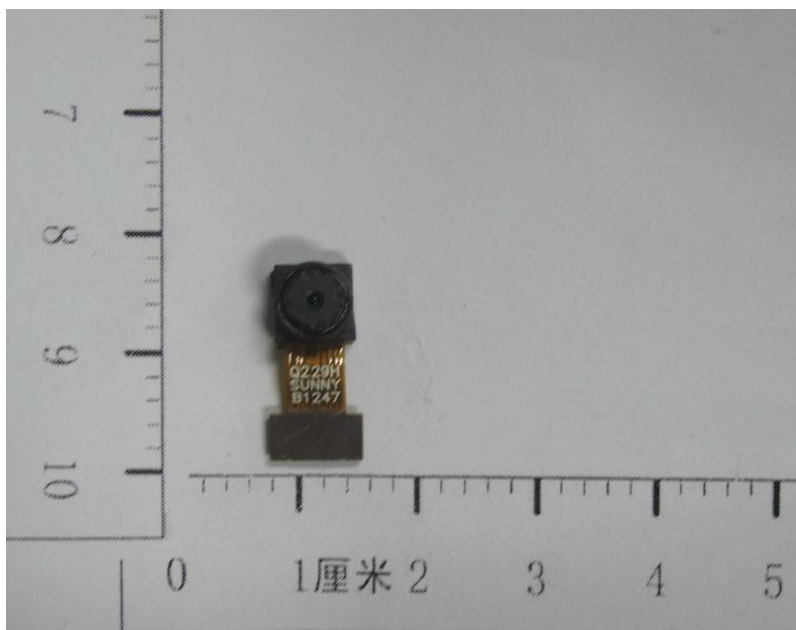
名称：振子

料号：TYC9206A150160



名称：主 FPC

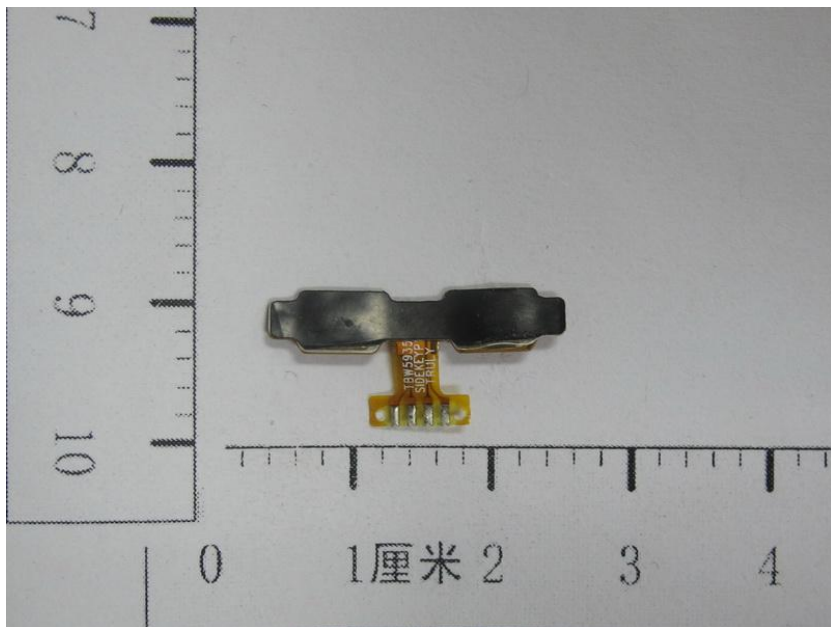
料号：TY0220153T



名称：前摄像头

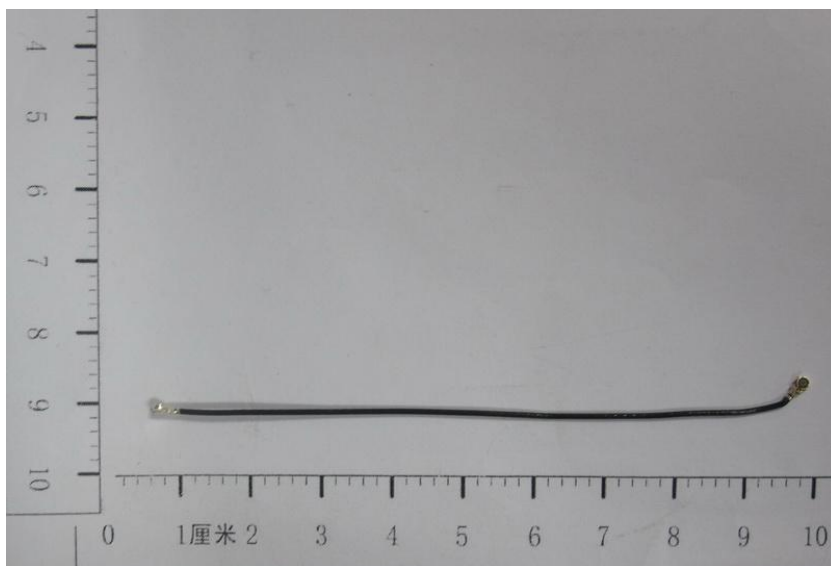
描述：200W

料号：TYC200BF11101S



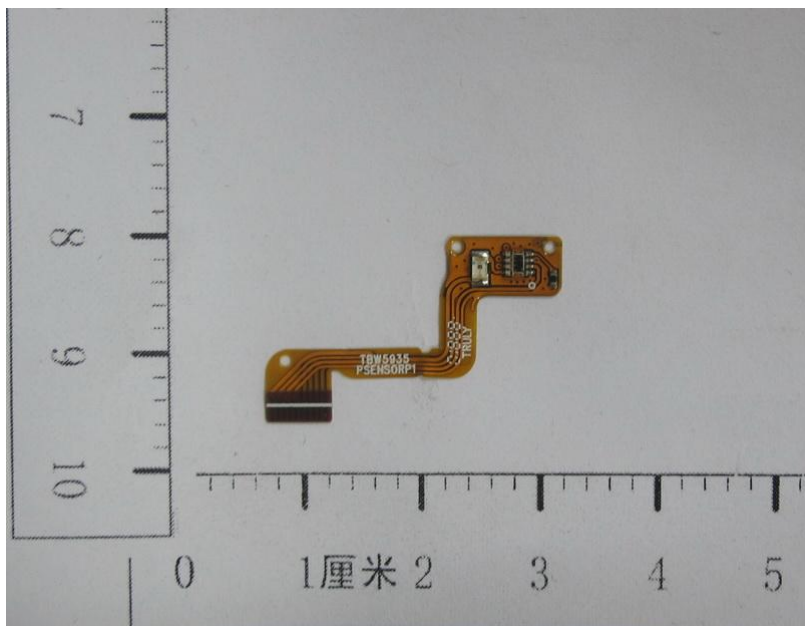
名称：音量键 FPC

料号：TY0220155T



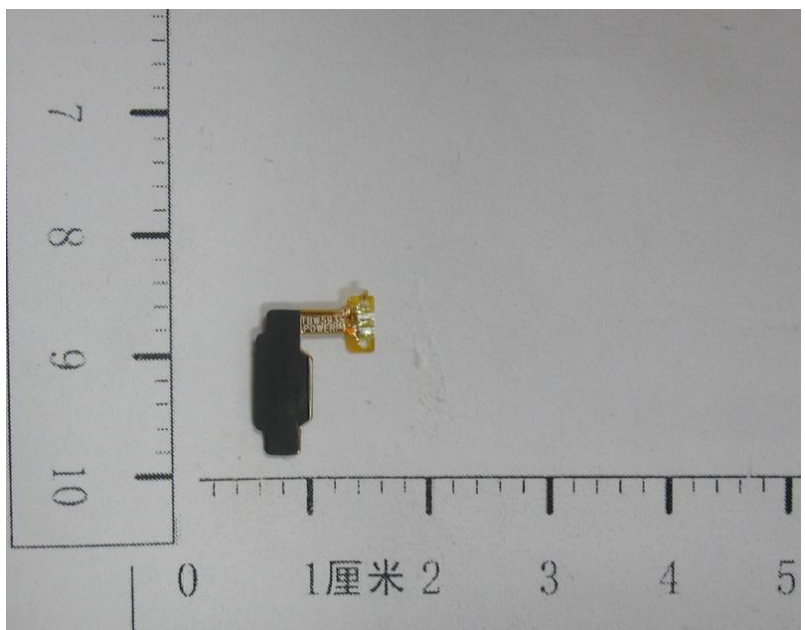
名称：RF CABLE 线

料号：TYC5935B200056



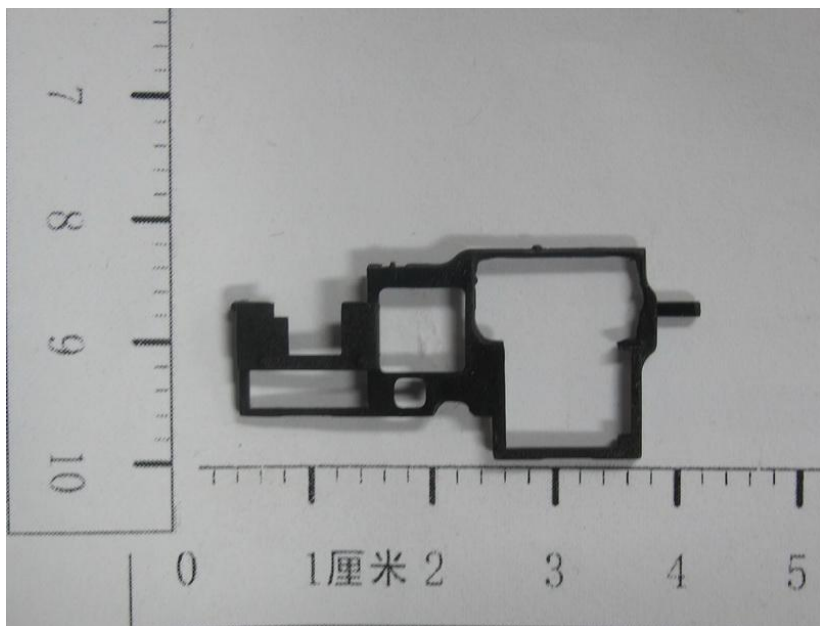
名称：传感器 FPC

料号：TYC593580420510



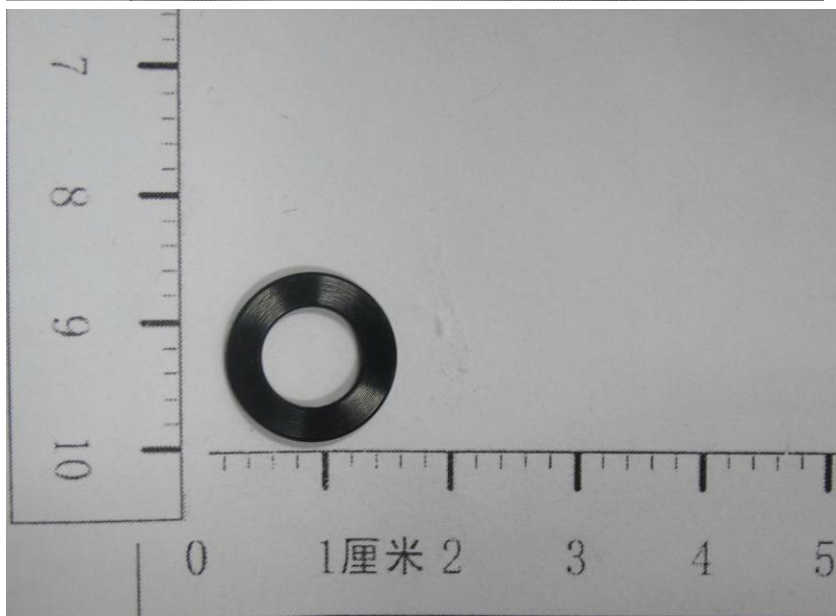
名称：开关机键 FPC

料号：TY0220157T



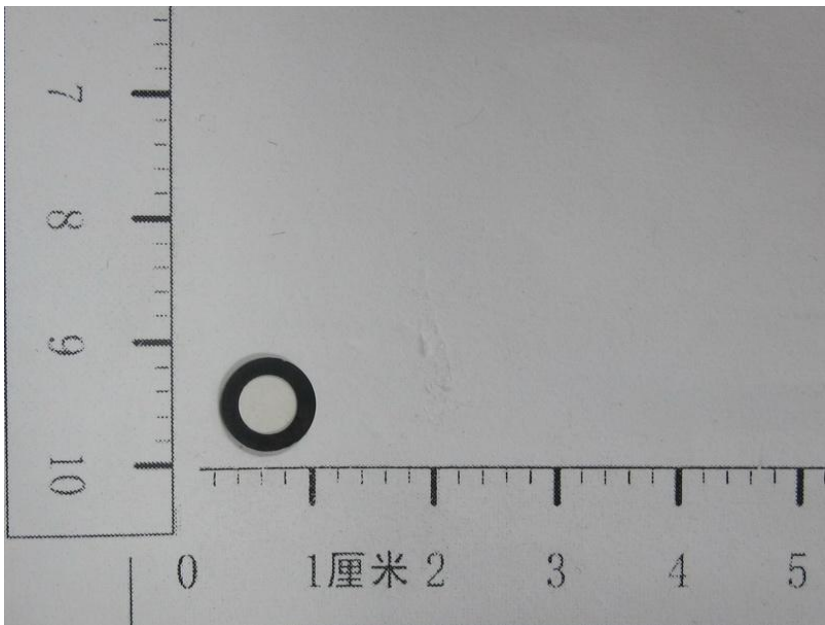
名称：传感器支架

料号：TYC5935B280009



名称：摄像头装饰件

料号：TYC5935B070217



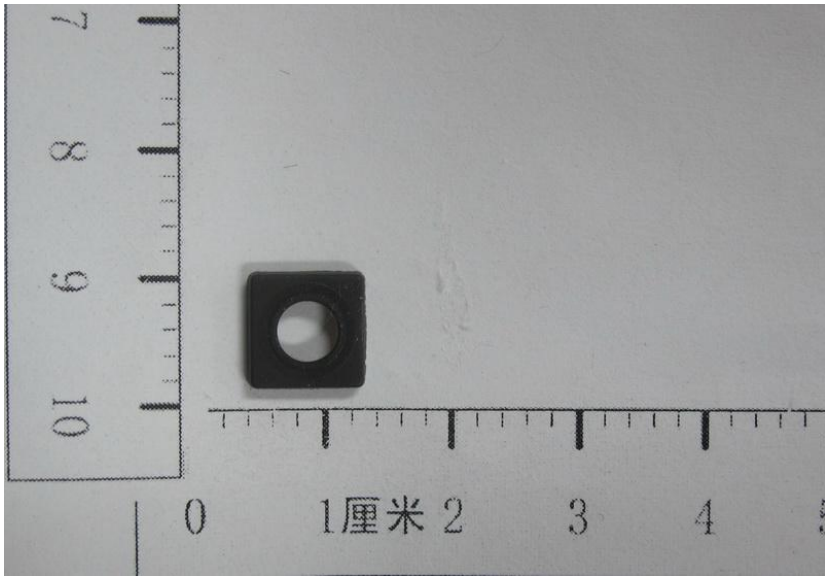
名称：摄像头镜片

料号：TYC5935B070031



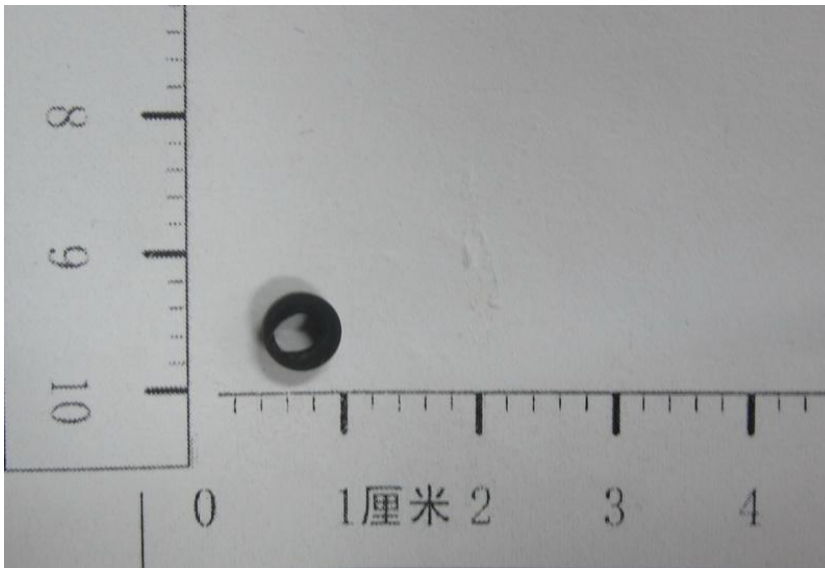
名称：距离传感器硅胶套

料号：TYC5935B230050



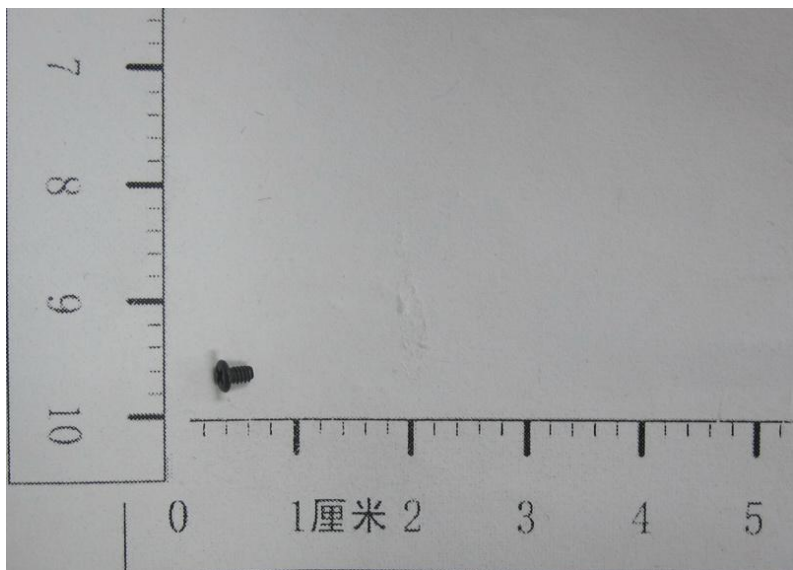
名称：后摄像头胶套

料号：TYC5935B230150



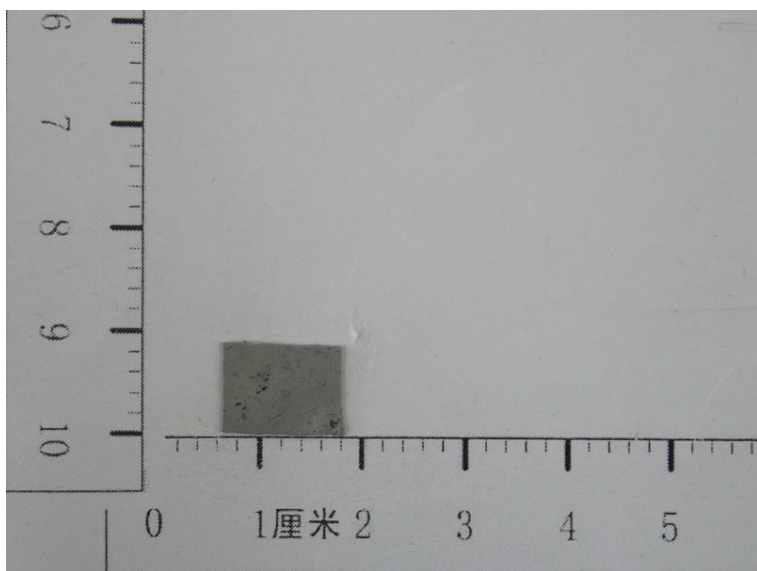
名称：MIC 胶套

料号：TYC5935B230250



名称：螺钉

料号：TYC7815A190069

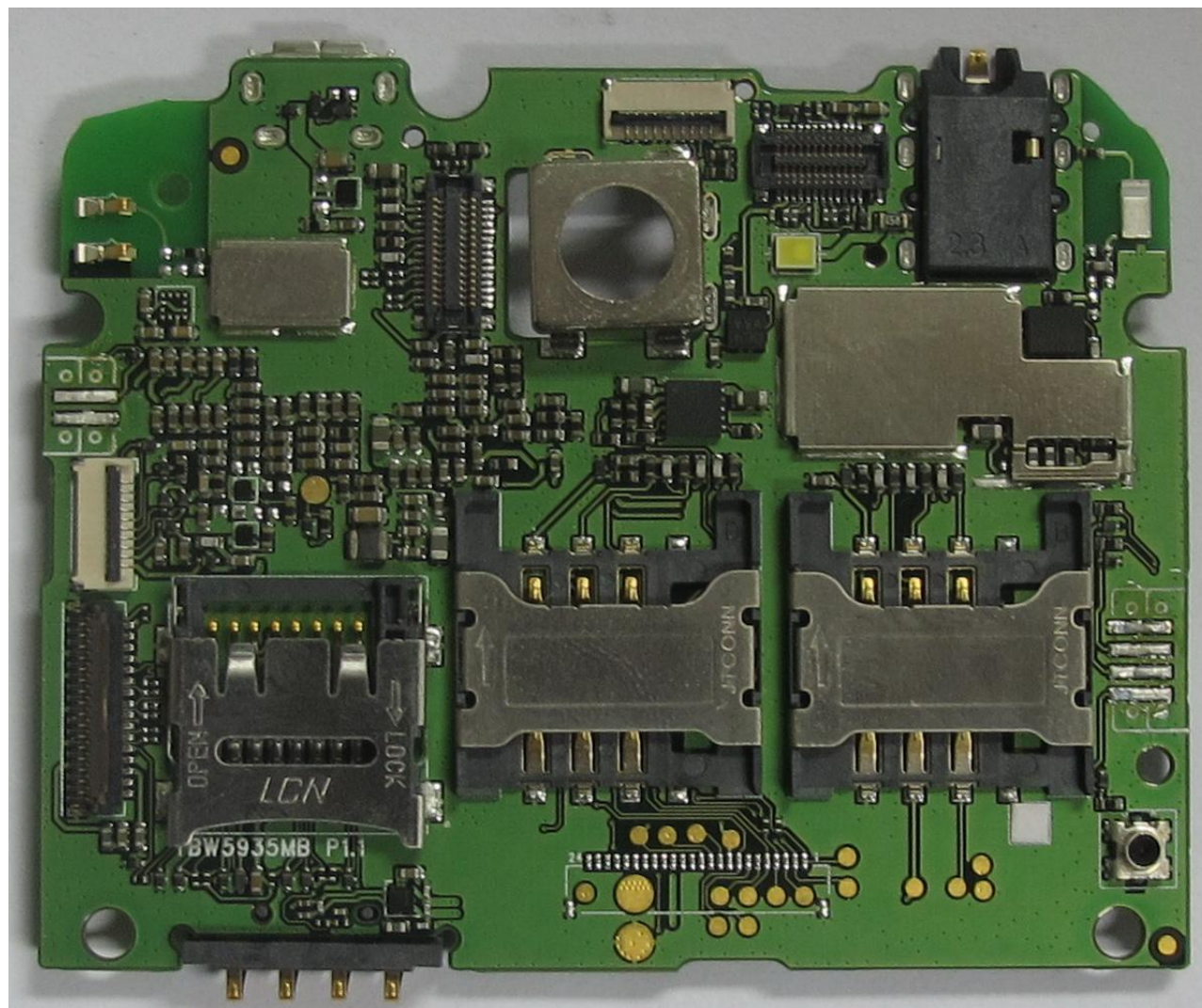


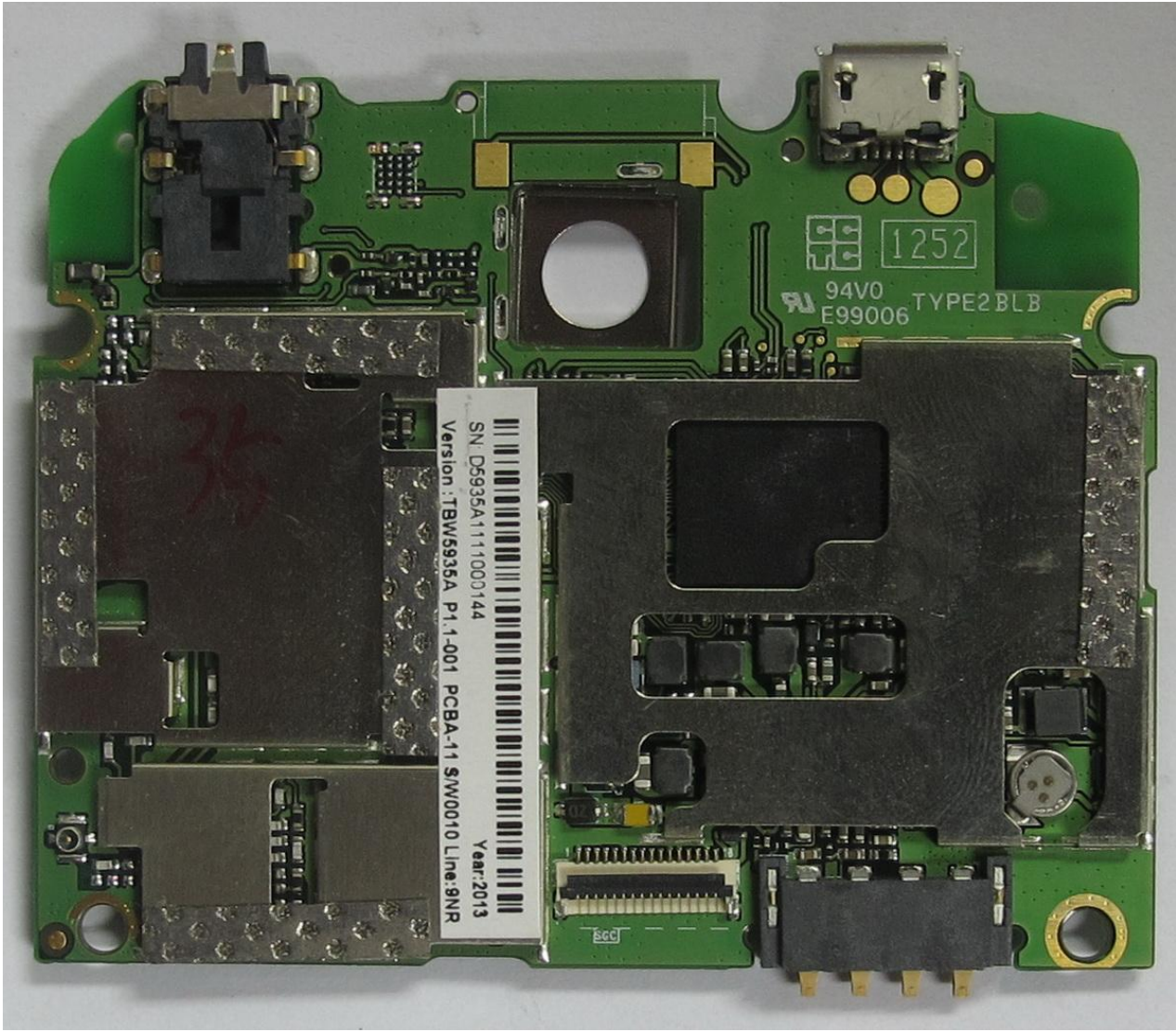
名称：芯片散热硅胶

料号：TYC5935B221336

主板外观图

主板型号: TBW5935 MB P1.1





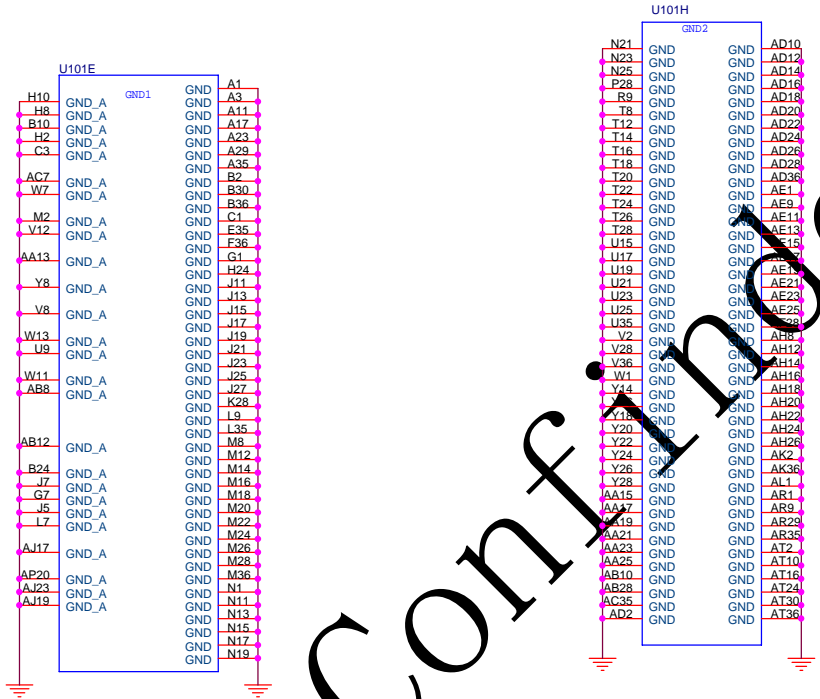
SN: D5935A1111000144
Year: 2013
Version: TBW5935A P1.1-001 PCBA-11 SW0010 Line: 9NR

1252

94V0 E99006 TYPE2 BLB

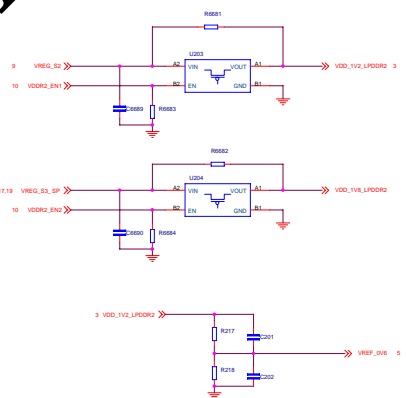
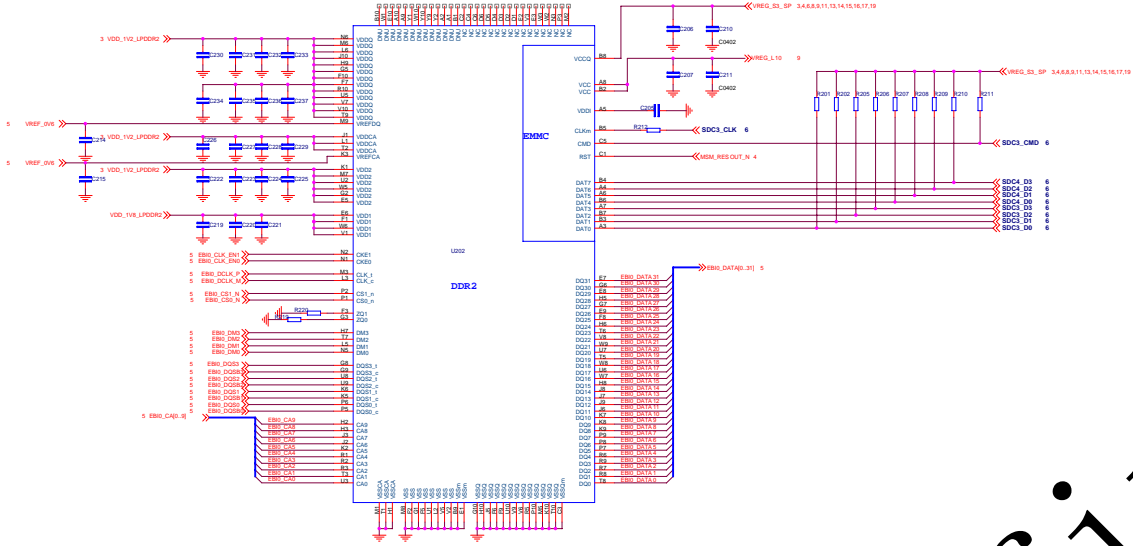
66C

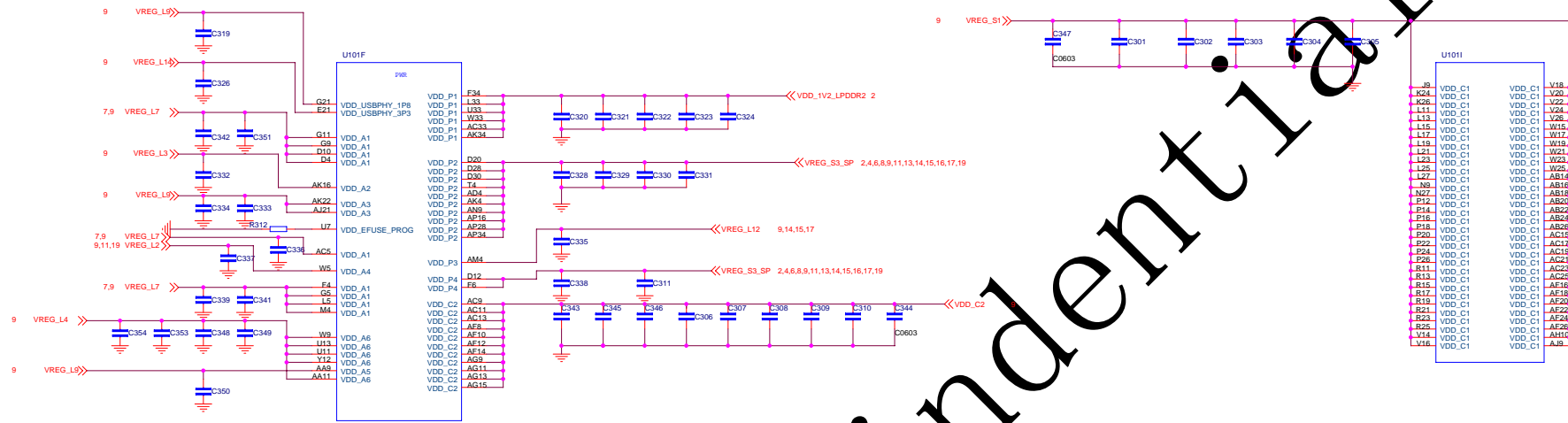
Tianyu Confidential



<Core Design>		
Title 8225Q GND AND NC		
Size A3	Document Number 北京天宇明通信设备股份有限公司	Rev P1
Date: Thursday, January 17, 2013	Sheet 1	of 20

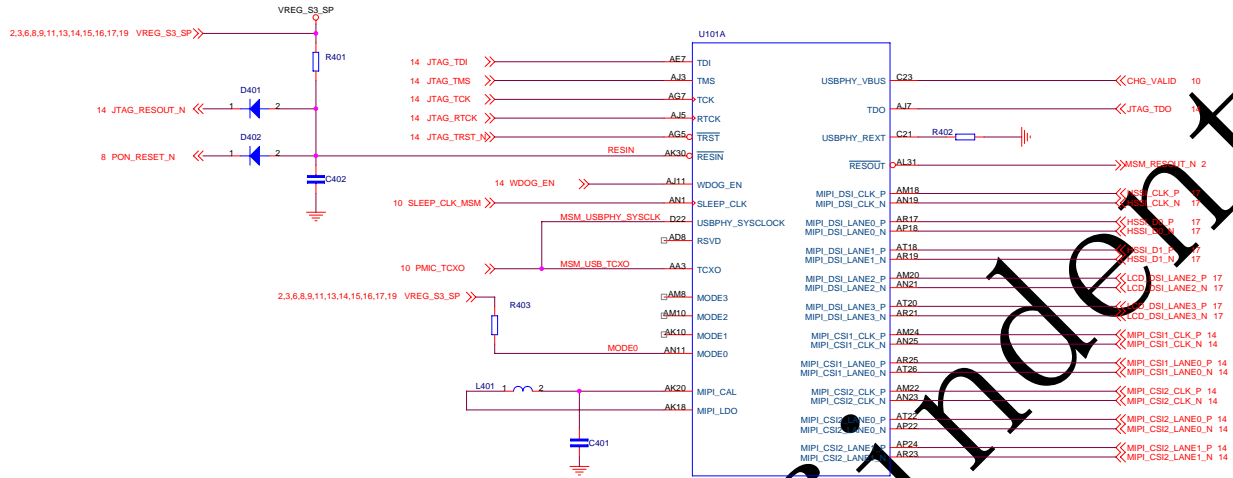
Tianyu Confidential





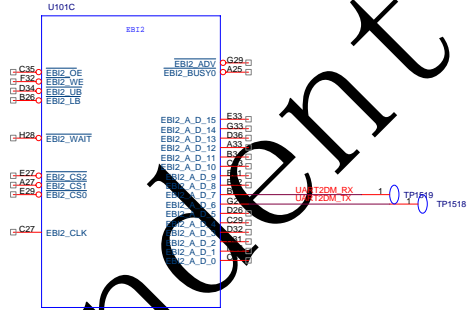
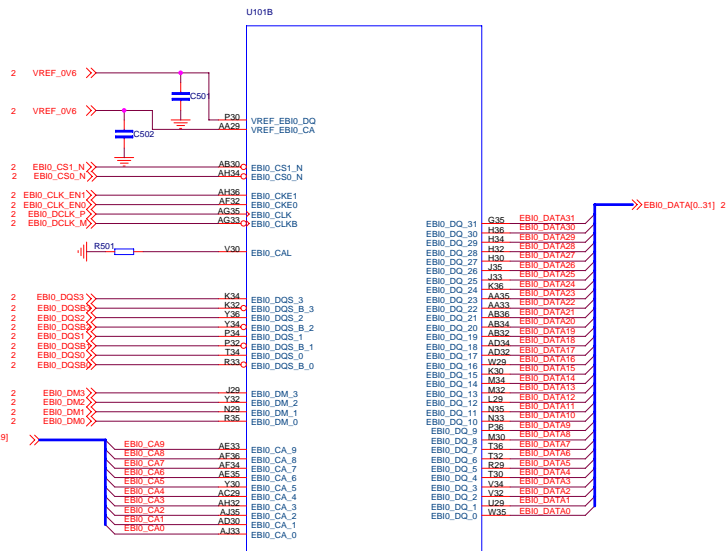
U1011	VDD_C1	VDD_C1	VDD_C1
J8	VDD_C1	VDD_C1	V118
K24	VDD_C1	VDD_C1	V120
K26	VDD_C1	VDD_C1	V122
L11	VDD_C1	VDD_C1	V124
L13	VDD_C1	VDD_C1	V126
L15	VDD_C1	VDD_C1	V155
L17	VDD_C1	VDD_C1	V117
L19	VDD_C1	VDD_C1	V119
L21	VDD_C1	VDD_C1	V121
L23	VDD_C1	VDD_C1	V123
L25	VDD_C1	VDD_C1	V125
L27	VDD_C1	VDD_C1	V127
N9	VDD_C1	VDD_C1	V116
N27	VDD_C1	VDD_C1	V118
P12	VDD_C1	VDD_C1	V120
P14	VDD_C1	VDD_C1	V122
P16	VDD_C1	VDD_C1	V124
P18	VDD_C1	VDD_C1	V126
P20	VDD_C1	VDD_C1	V128
P22	VDD_C1	VDD_C1	V130
P24	VDD_C1	VDD_C1	V132
P26	VDD_C1	VDD_C1	V134
R11	VDD_C1	VDD_C1	V136
R13	VDD_C1	VDD_C1	V138
R15	VDD_C1	VDD_C1	V140
R17	VDD_C1	VDD_C1	V142
R19	VDD_C1	VDD_C1	V144
R21	VDD_C1	VDD_C1	V146
R23	VDD_C1	VDD_C1	V148
R25	VDD_C1	VDD_C1	V150
V104	VDD_C1	VDD_C1	V104
V116	VDD_C1	VDD_C1	V116

Tianyu Confidential



Tianyu Confidential

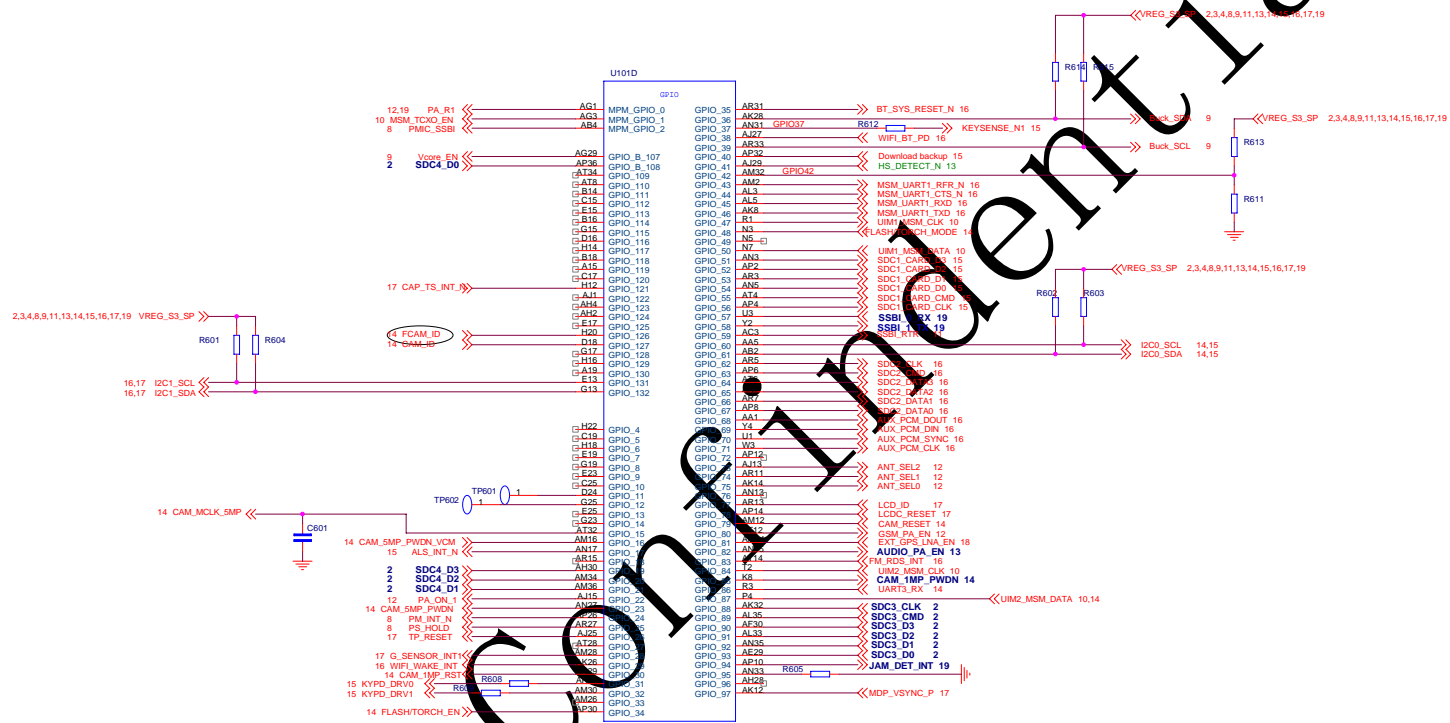
«Core Design»		
Title	825Q CONTROL	
Size	Document Number	Rev
A2	北京天宇明德通信设备股份有限公司	P1
Date:	Thursday, January 17, 2013	Sheet 4 of 20



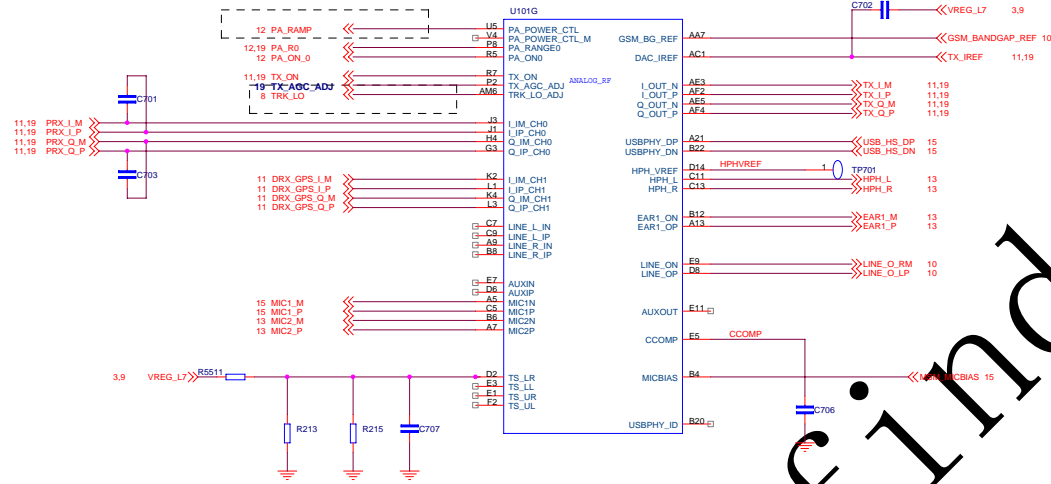
Tianyu Confidential

«Core Design»		
File	82250 EBIO2	
Size	Document Number	Rev
A2	北京天宇同德通信设备股份有限公司	P1
Date:	Thursday, January 17, 2013	Sheet 5 of 20

Tianyu Confidential

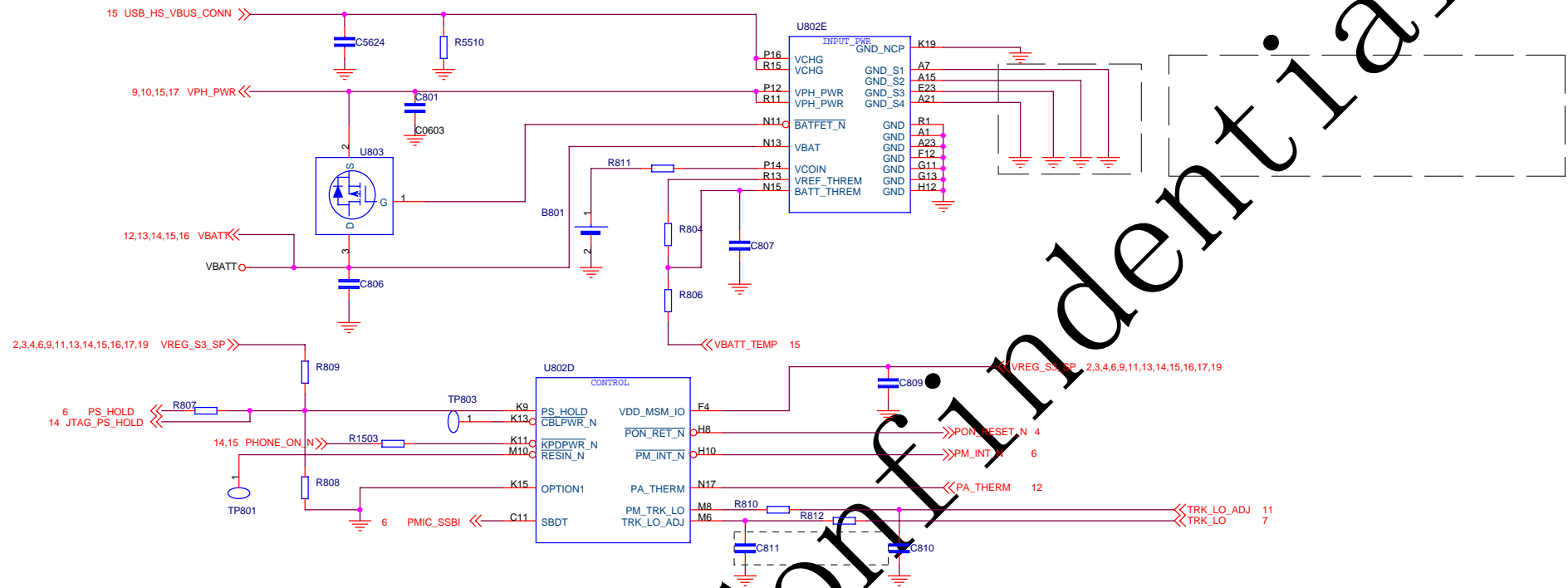


<Core Design>			
file	8225Q GPIO		
Size	Document Number		Rev
A2	北京天宇微系统科技股份有限公司		P1
Date	Thursday, January 17, 2013	Sheet	6 of 20



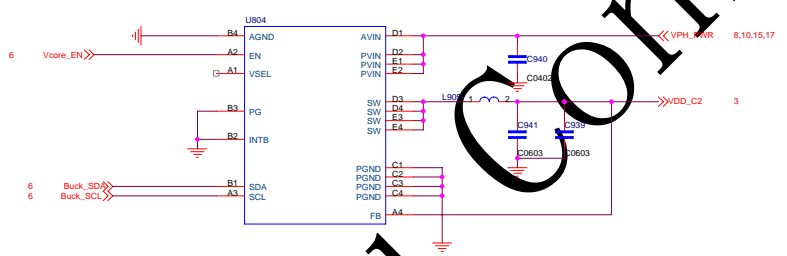
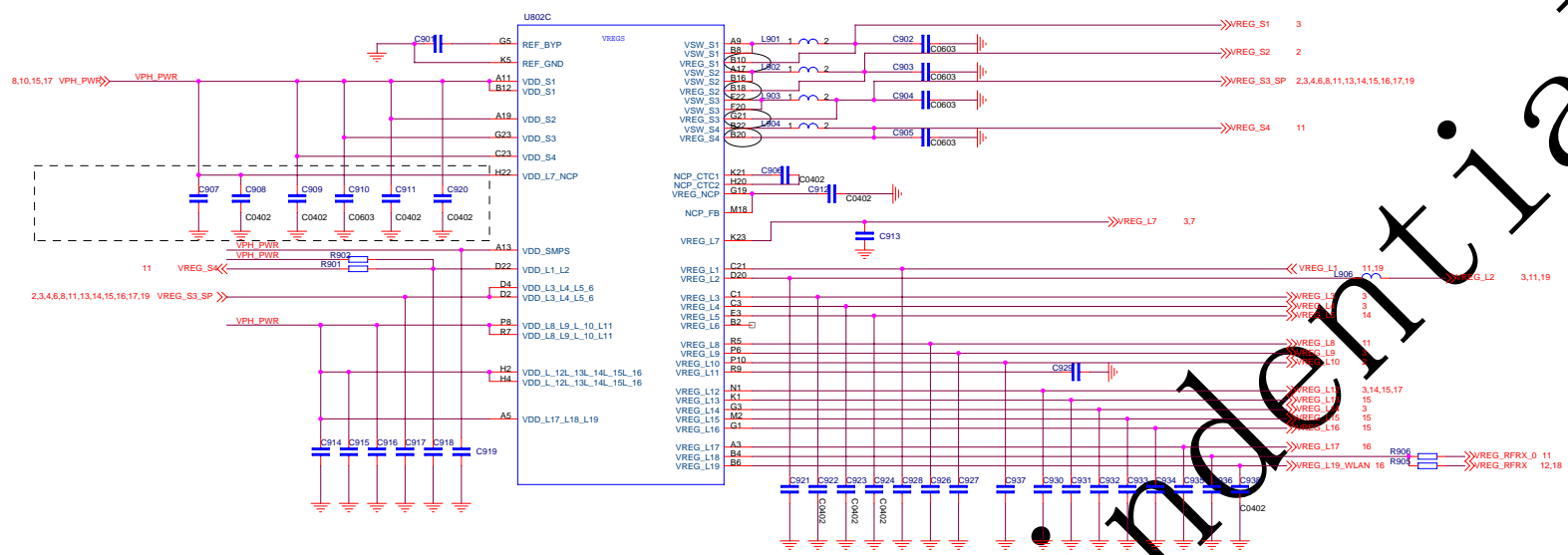
Tianyu Confidential

<Core Design>		
file	8225Q ANALOG/RF	
Size	Document Number	Rev
A2	北京天宇通信科技股份有限公司	P1
Date	Thursday, January 17, 2013	Sheet 7 of 20



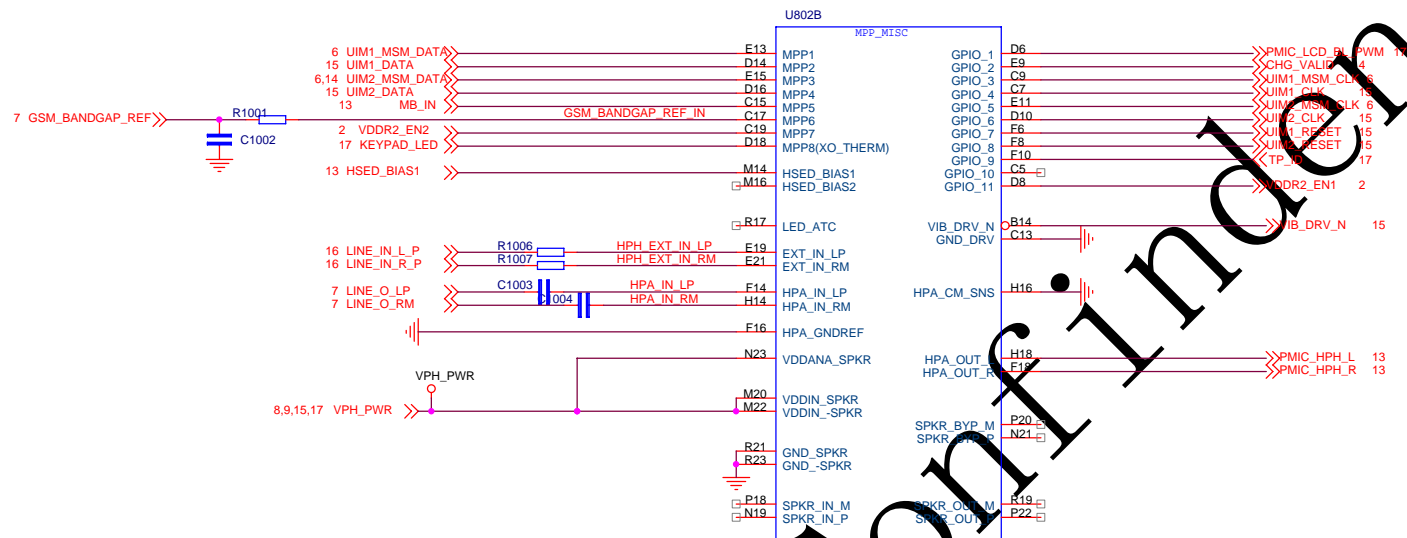
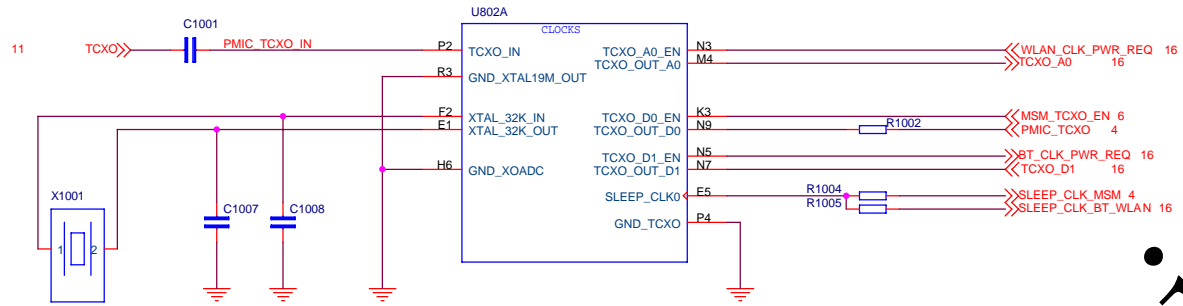
Tianyu Confidential

<Core Design>		
Title	PM8029	
Size	Document Number	Rev
A3	北京天宇朗通通信设备股份有限公司	P1
Date:	Thursday, January 17, 2013	Sheet 8 of 20



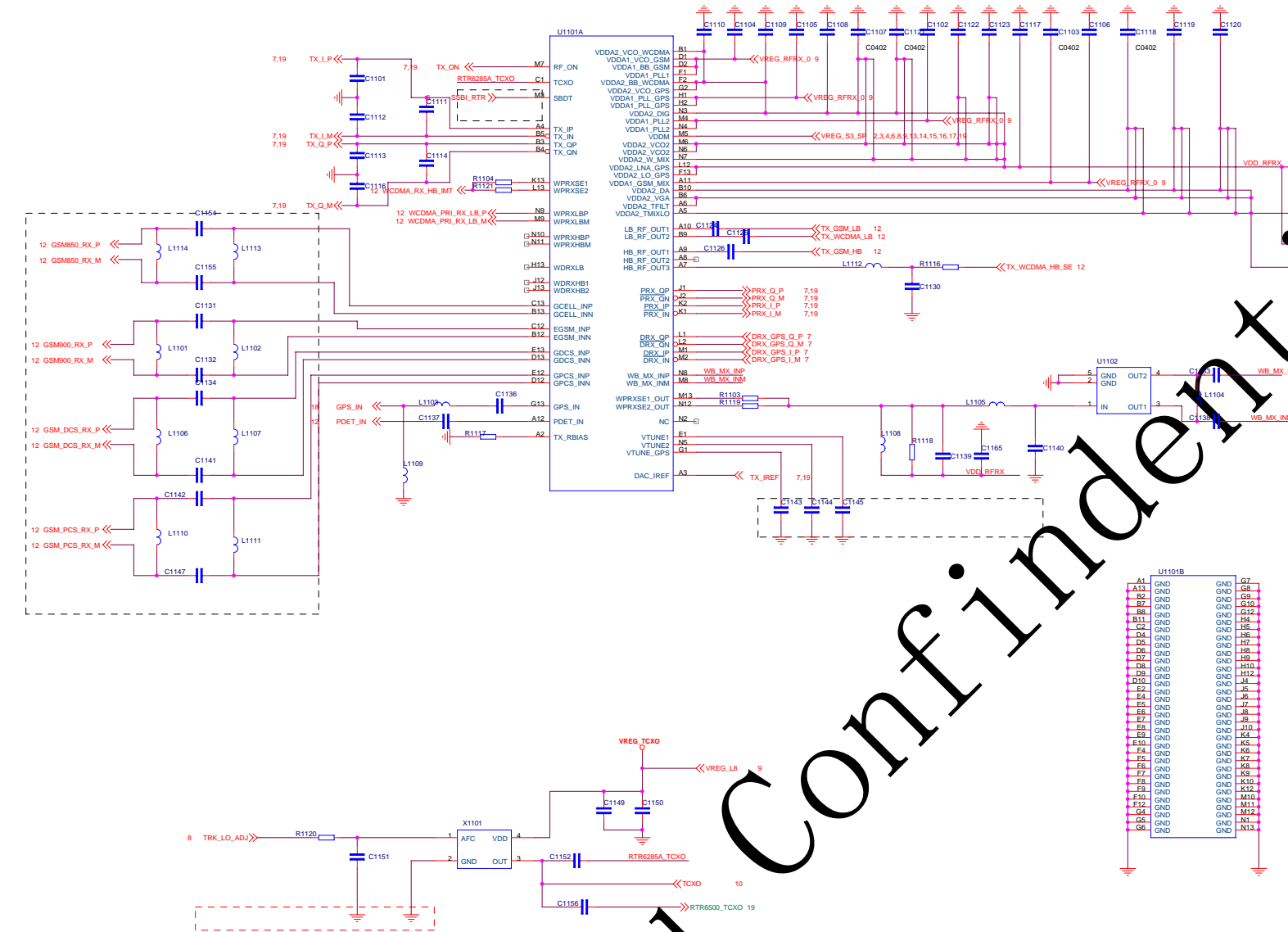
Tianyu Confidential

<Core Design>			
file PMR029 VREGS			
Size	Document Number		Rev
A2	北京天宇通信科技股份有限公司		P1
Date:	Thursday, January 17, 2013	Sheet	9 of 20



Tianyu Confidential

<Core Design>		
Title	PM8029 MPP/CLOCK	
Size	Document Number	Rev
A3	北京天宇移动通信设备股份有限公司	P1
Date:	Thursday, January 17, 2013	Sheet 10 of 20

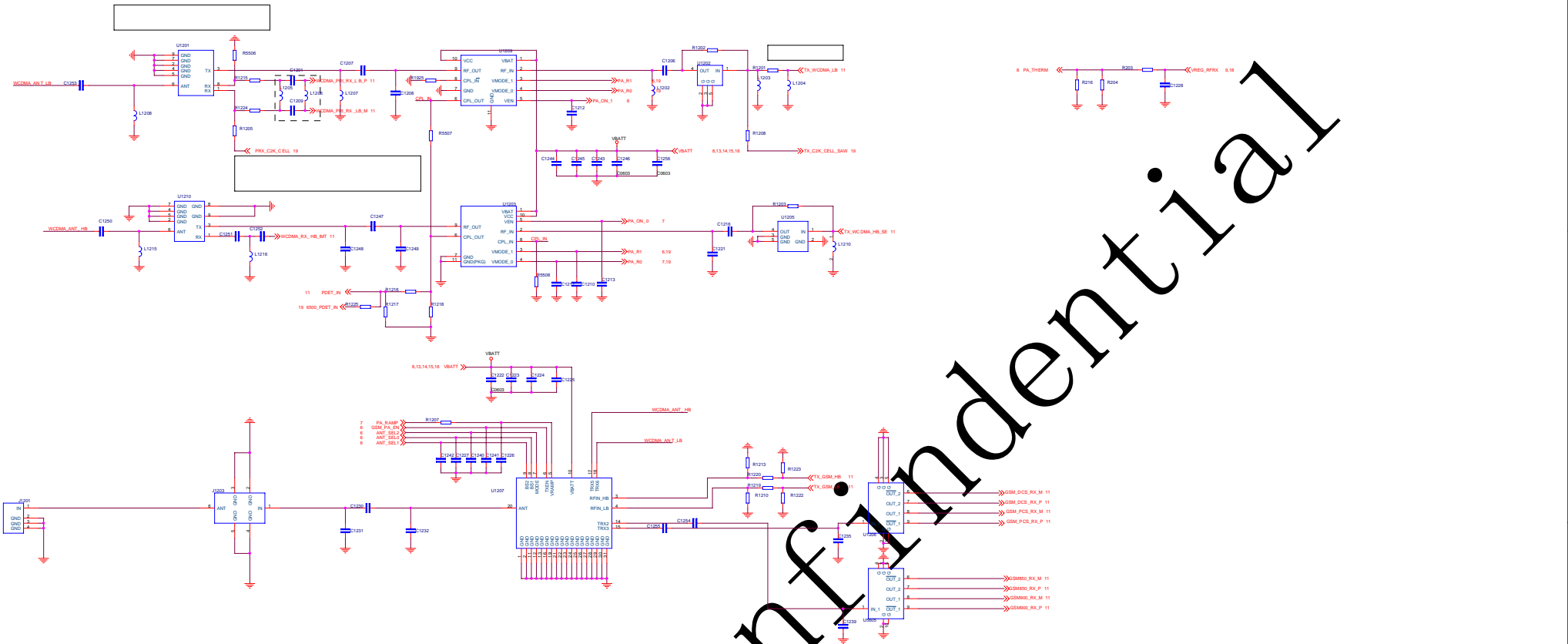


U1101B

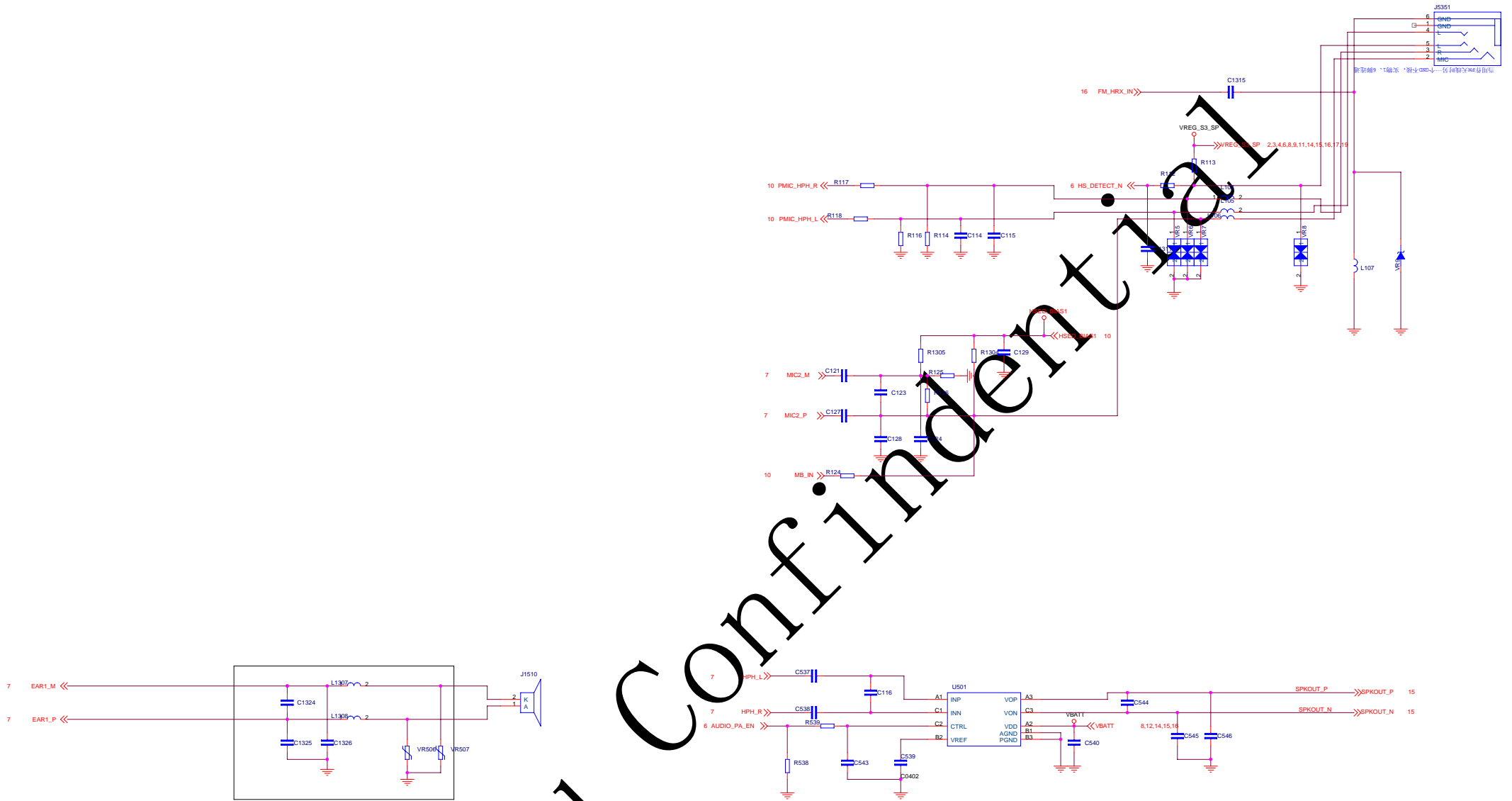
A1	GND	G7	GND
A13	GND	G8	GND
B2	GND	G9	GND
B7	GND	G10	GND
B8	GND	G12	GND
C1	GND	H4	GND
C2	GND	H5	GND
D4	GND	H6	GND
D5	GND	H7	GND
D6	GND	H8	GND
D7	GND	H9	GND
D8	GND	H10	GND
D9	GND	H12	GND
D10	GND	H4	GND
E2	GND	J5	GND
E4	GND	J6	GND
E5	GND	J7	GND
E7	GND	J8	GND
E9	GND	J9	GND
E10	GND	J10	GND
F4	GND	K4	GND
F5	GND	K5	GND
F6	GND	K6	GND
F7	GND	K7	GND
F8	GND	K8	GND
F9	GND	K9	GND
F10	GND	K10	GND
F11	GND	K12	GND
G4	GND	M10	GND
G10	GND	M11	GND
G12	GND	M12	GND
G6	GND	N1	GND
G8	GND	N13	GND

Tianyu
 Confidential

«Core Design»	
File	RTR6285A
Size	Document Number
A2	北京天宇同德通信设备股份有限公司
Date:	Thursday, January 17, 2013
Sheet	11 of 20



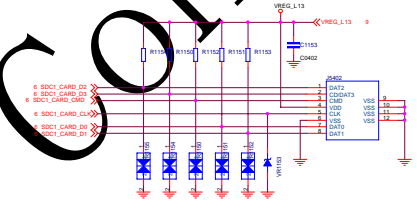
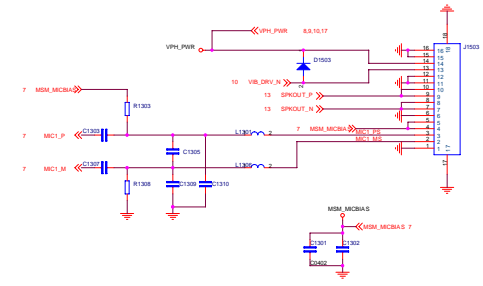
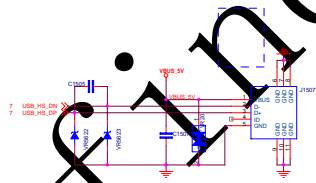
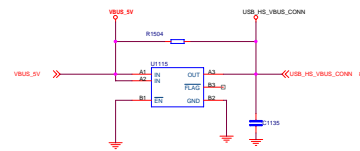
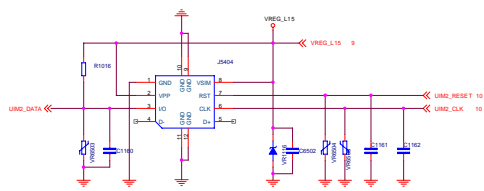
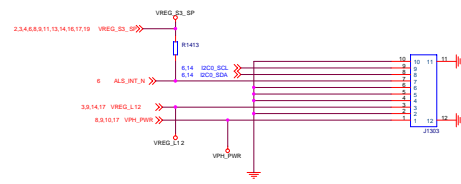
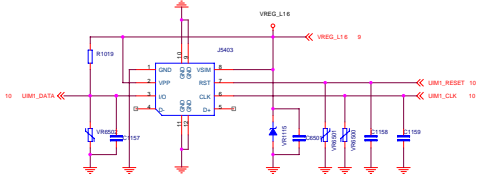
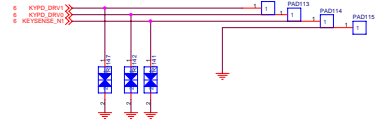
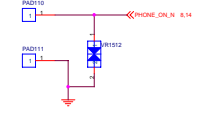
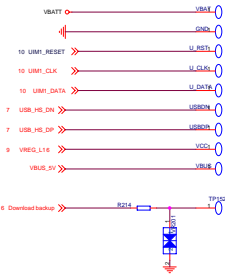
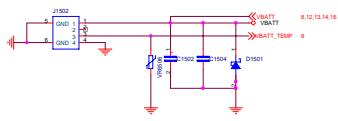
Tianyu Confidential



Tianyu

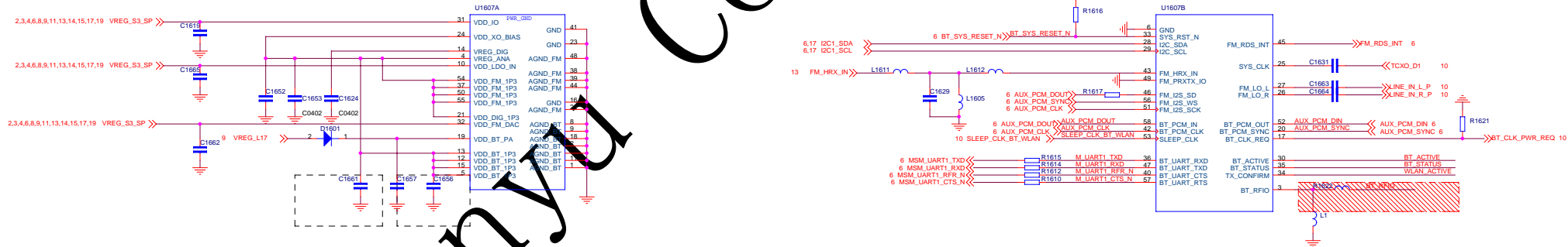
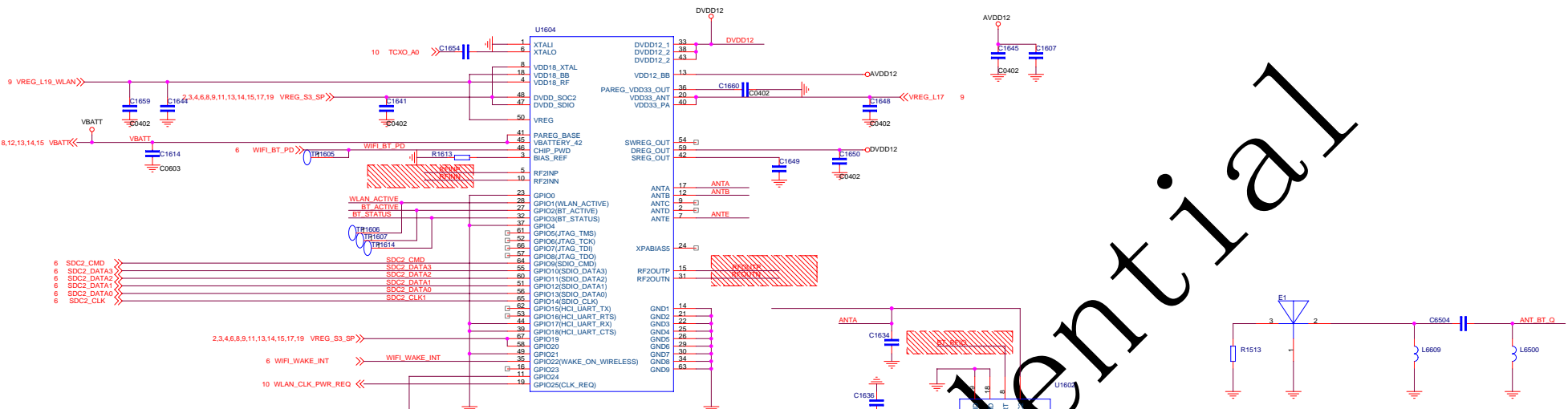
Confidential

Core Design		
File AUDIO		
Size A2	Document Number 北京天宇同德通信设备股份有限公司	Rev 01
Date: Thursday, January 17, 2013	Sheet 13	of 20



Confidential

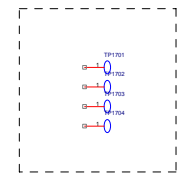
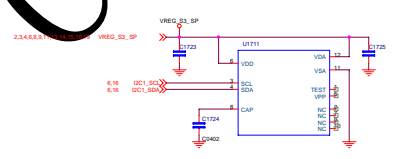
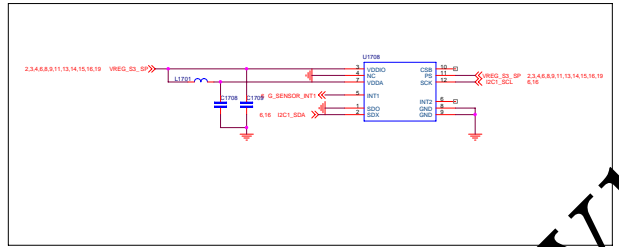
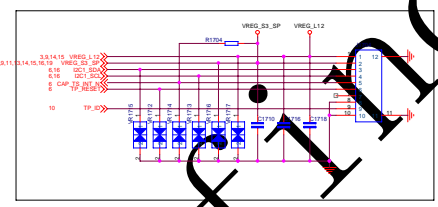
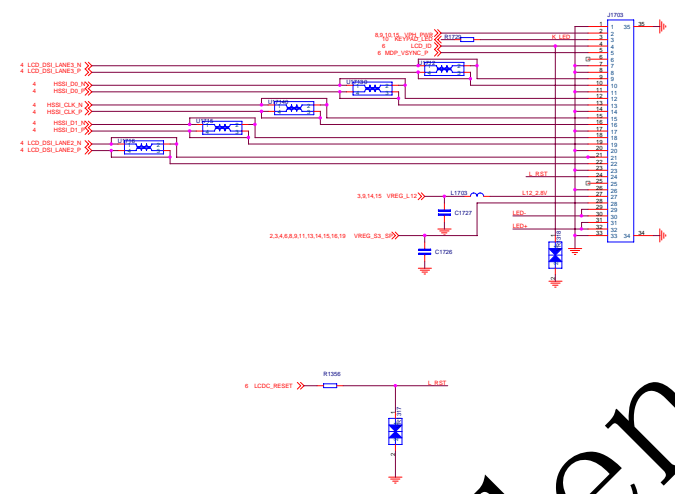
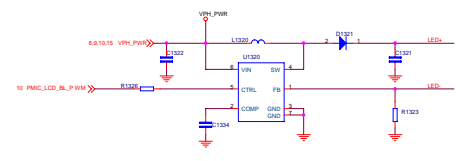
Confidential

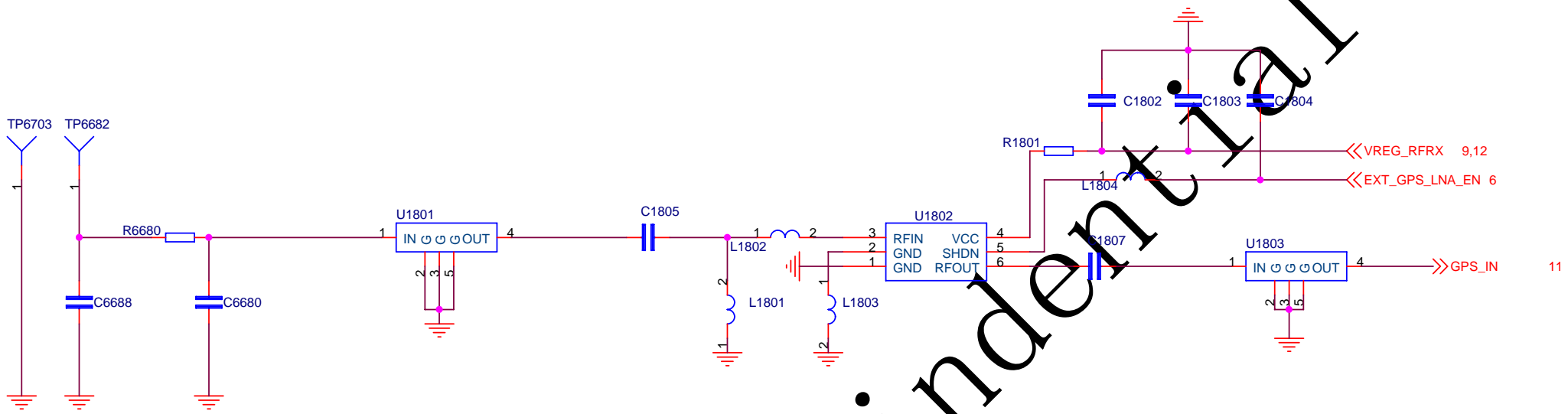


«Core Design»		
Title BT and WIFI		
Size A2	Document Number 北京天宇明德通信设备股份有限公司	Rev P1
Date: Thursday, January 17, 2013		Sheet 16 of 20

Confidential

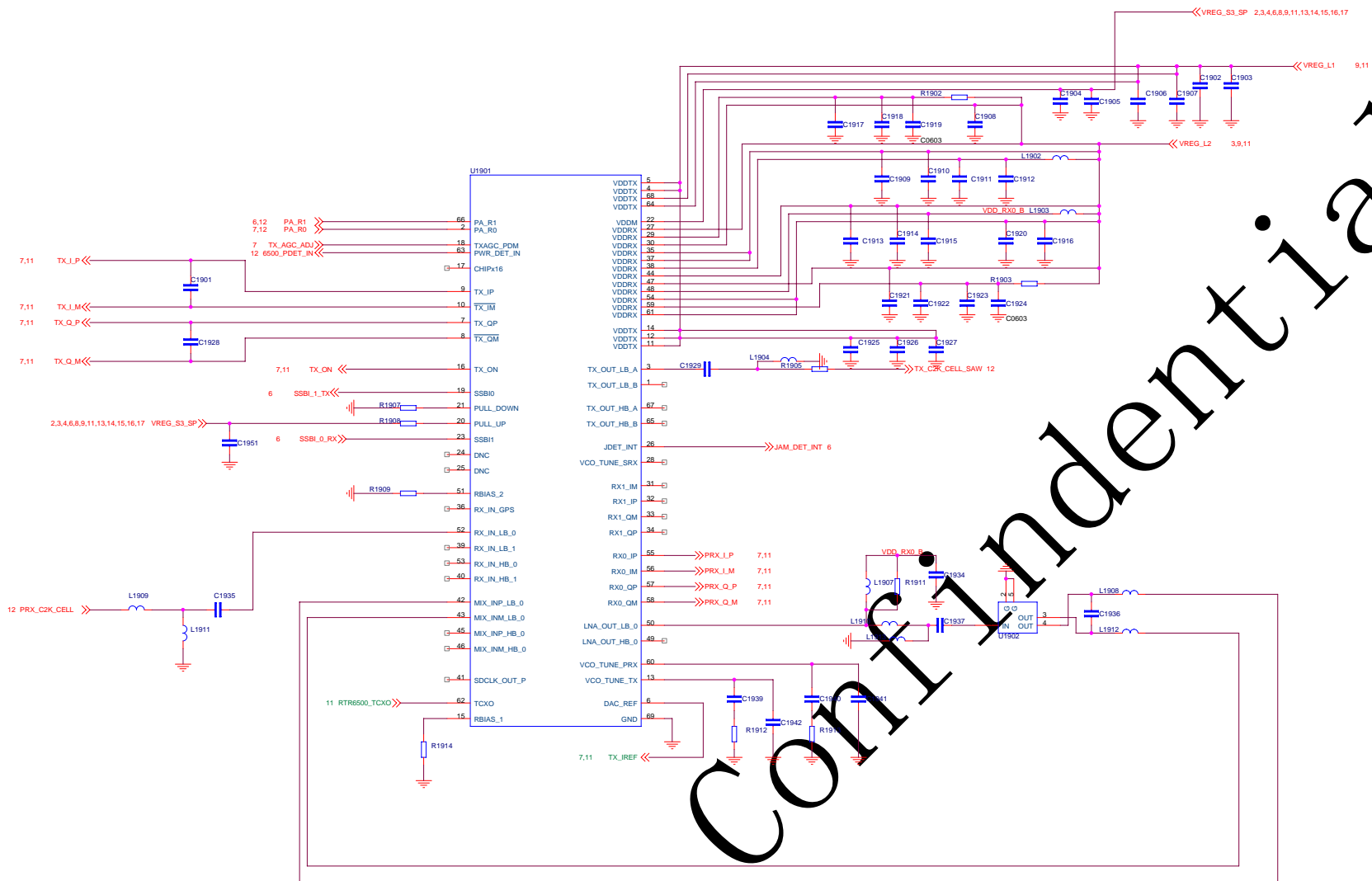
Tianyu





Tianyu Confidential

<Core Design>		
Title GPS		
Size A4	Document Number 北京天宇朗通通信设备股份有限公司	Rev P1
Date: Thursday, January 17, 2013	Sheet 18	of 20



Tianyu

Confidential

Core Design		
File	RTR6500	
Size	Document Number	Rev
A2	北京天宇同德通信设备股份有限公司	P1
Date	Thursday, January 17, 2013	Sheet 19 of 20

Tianyu Confidential

«Core Design»		
Title	CHANGE LIST	
Size	Document Number	Rev
C	北京天宇通信设备股份有限公司	P1
Date:	Thursday, January 17, 2013	Sheet 20 of 20

